

State of California
The Resources Agency
DEPARTMENT OF FISH AND GAME

MARINE RECREATIONAL FISHERIES STATISTICS SURVEY
FOR NORTHERN AND CENTRAL CALIFORNIA,
QUARTERLY REPORT NO. 23,
JANUARY TO MARCH 1985

Compiled by
Konstantin A. Karpov

MARINE RESOURCES
Administrative Report No. 86-4

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ABSTRACT

Field intercept Marine Recreational Fisheries Statistics Survey (MRFSS) data for central and northern California, collected in January to March 1985, are presented in a data report format. Data in this quarterly report are subdivided into three categories: primarily by five geographical areas; secondarily by fishing modes and gear types within each area; and finally by catch definition for each area, mode, and gear type. Tables are presented for these categories, each with three sections: sampled effort, ranked catch, and catch-per-unit-effort (CPUE). Also, within each area, length-frequency histograms and tables are presented for select species.

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2/ Marine Resources Division, 19160 So. Harbor Drive, Fort Bragg, CA 95437.

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INTRODUCTION

The California Department of Fish and Game under contract to the National Marine Fisheries Service (NMFS) has participated in the Marine Recreational Fisheries Statistics Survey (MRFSS) from mid 1979 to the present. The survey was initiated to gather catch and effort statistics for marine recreational fisheries along the Pacific west coast.

Annual summaries of these statistics have already been published on a regional basis (Current Fisheries Statistics Numbers 8321, 8323, and 8325). In these summaries, California's data is divided into two regions: Del Norte to San Luis Obispo Counties (north-central region), and Santa Barbara to San Diego Counties (southern region).

This Quarterly Report No. 23 covers the period of January through March 1985. It supplements the federal annual summary for only the north-central region of California (Del Norte to San Luis Obispo Counties). This region is divided into five areas (subregions) corresponding to historical ports.

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Area 1 (Del Norte and Humbolt Counties)

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METHODS

Catch and length data were collected by Department biologists intercepting anglers actively fishing or in the process of leaving a fishing site. Sampling methodology is described in part in Current Fisheries Statistics (8321, 8323, and 8325).

Data in this quarterly report are subdivided into three categories: primarily by five geographical areas; secondarily by fishing modes and gear types within each area; and finally by catch definition for each area, mode, and gear type. Tables are presented for these categories, each with three sections: sampled effort, ranked catch, and catch-per-unit-effort (CPUE). Also, within each area, length-frequency histograms and tables are presented for select species.

Study Areas

Study areas range in size from one county in Area 5 to seven counties in Area 3 (Figure 1). Adjacent counties are combined whenever similarity of habitat and species composition warrants. Boat modes are segregated by county only if separate grounds were fished (i.e. Sonoma County Bodega Bay Fishery, sub-area 097, from Mendocino county, sub-area 045).

Area 1, including Del Norte and Humboldt counties, extends from the Oregon border to Shelter Cove. Both counties are combined in all mode comparisons. Area 2 contains Mendocino county and that part of Sonoma county which is north of Bodega Bay. Both counties are combined for all modes except the boat modes (private/rental boat and CPFV). This is the only area that includes shore divers using spear gear. The San Francisco Area 3 is segregated into ocean and bay. This area includes anglers from seven counties; Marin, Solano, Contra Costa, Alameda, Santa Clara, San Francisco, and San Mateo. These counties

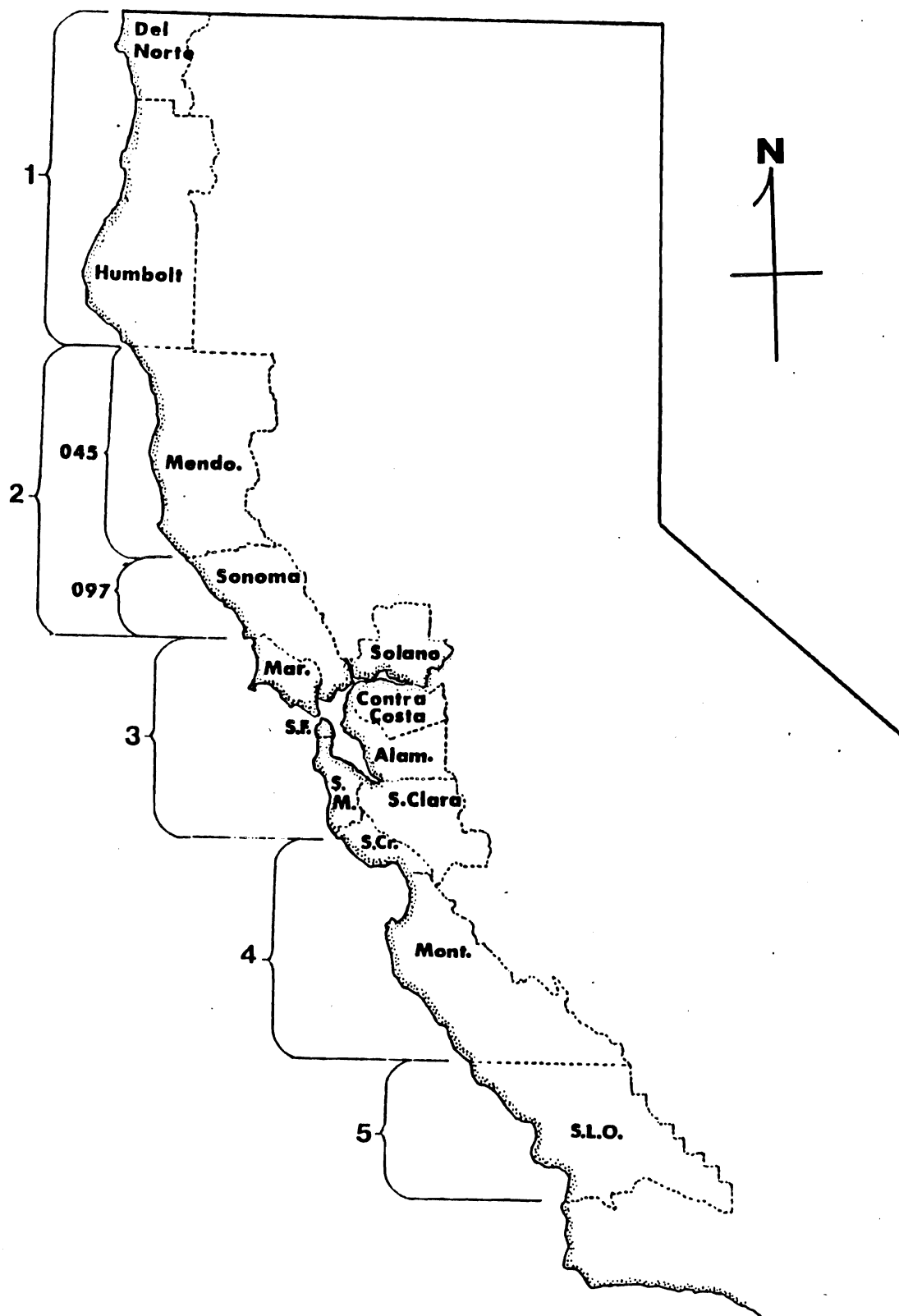


FIGURE 1. Study area counties and sub-areas in northern and central California.

encircle the bay and extend down to Ano Nuevo. Two sets of tables and figures were generated based on whether anglers specified having fished in the ocean or the bay. Bay anglers were predominantly from San Francisco Bay, but also included a small percentage of Halfmoon Bay anglers. Area 4 includes Santa Cruz county that part of Monterey County which is north of Ragged Point. This is the only area to include tables on boat divers using spear gear. Area 5, San Luis Obispo County, extends down to Point Sal.

Fishing Modes

Modes of fishing were organized into six categories: (i) pier or dock, (ii) jetty or breakwater, (iii) bridge or causeway, (iv) beach or bank, (v) private or rental boat, and (vi) commercial passenger fishing vessel (CPFV).

Gear Types

Three types of gear were used; (i) hook-and-line, (ii) spear, and (iii) net. Spears were used only by divers. Dipnet and castnet were the only net gears in active use in northern and central California.

Catch Definition

Catch is defined three different ways: (i) all fish captured, including fish returned dead or alive, those not available at the sampling site (i.e. filleted or given away etc.), and those available to measure; (ii) landed catch, not including fish returned dead or alive; and, (iii) the measured catch only. Fish caught but unavailable to measure were identified to the nearest taxa using the angler's description.

Computer-Generated Tables and Figures

The Microcomputer Program Series (MPS) was developed to generate the tables and figures used in this report. The programs were designed for flexibility and ease of use on area microcomputers. The programs allow the user to generate tables and figures for any combination of area, mode, gear, or definition of catch. Data generated by these programs include: sampled effort, ranked catch, CPUE, and length-frequency data. Documentation of logic and program listings are available (Karpov, 1984).

Sampled Effort

Sampled effort is the same for all three catch definitions for a particular area, mode, or gear. It includes the number of anglers intercepted and the total hours fishing effort.

Ranked Catch

Ranked catch includes rank of species caught by number or weight, and other statistics depending on the catch definition. Fish are ranked by number caught in two of the catch definitions: all fish caught, and landed catch. The measured catch has fish ranked by weight caught. The measured catch tables include average lengths and standard deviation, and derived average weight.

CPUE

CPUE is calculated using two definitions of both "catch" and "effort". Catch is either number or weight (kilograms) caught. Effort is either angler days or total hours fished. CPUE, computed using weight caught as opposed to number landed, are included for only two of the catch definitions: landed catch

and measured catch. Average weights incorporated in the landed catch tables are derived either from the respective measured catch table for the same species or, for the more general species groups by calculating a group average weight. Group average weights of constituent species were calculated preferentially from this quarter's data for the same mode, gear, and area; all four quarters of last year were occasionally used as an alternate source when more current data was unavailable. Angler days represent completed fishing days for most areas and modes. Occasional incomplete trips were included for all modes except boat modes.

Length-Frequency Data

Length-frequency histograms and tables were generated for select species. Histograms are included for highly abundant species where at least 10 measured fish occurred in the most frequent size interval. Histograms were summarized in either 5-, 10-, or 20-mm intervals. The criteria for assigning summary intervals was based on the largest recorded size for the species as reported in Miller and Lea (1972). Fish reported from 0 to 12 inches used 5-mm, greater than 12 to 24 inches used 10-mm and greater than 24 inches were assigned 20-mm intervals.

Length-frequency tables (see Appendix A) were generated for all species with at least five measured fish for any given area, mode, and gear. Tables were summarized in 5-mm intervals and include length statistics for possible use in ANOVA computations (Sokal and Rohlf, 1969).

Species Names and Length-Weight Parameters

Total length was recorded for all species except tuna-like fishes with rigid concave caudal fins; for these fork lengths were used. Weights were not actually measured; rather, they were determined, for all major species taken,

from precalculated length-weight relationships. The exponential relationship used was $W=aL^b$; where a and b are constants unique to each species (Appendix B).

Scientific and common names used were standardized using the American Fisheries Society list (1980).

Table 1. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 26
 Total Hours Effort for Anglers Intercepted = 59.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Seaperch, White	1	100	78.7
Perch, Pile	2	9	7.1
Seaperch, Striped	3	7	5.5
Sculpin, Pacific Staghorn	4	6	4.7
Surfperch, Silver	5	3	2.4
Greenling, Kelp	6	1	0.8
Cabezon	7	1	0.8
Total		127	100

C. CPUE

Catch per Angler Day = 4.88 Catch per Angler Hour = 2.15

Table 2. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 26
 Total Hours Effort for Anglers Intercepted = 59.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Seaperch, White	1	70	76.9	0.30	20.74
Perch, Pile	2	9	9.9	0.80	7.22
Seaperch, Striped	3	7	7.7	0.40	2.83
Surfperch, Silver	4	3	3.3	0.15	0.44
Greenling, Kelp	5	1	1.1	0.14	0.14
Cabazon	6	1	1.1	0.51	0.51
Total		91	100		31.88

C. CPUE

Catch per Angler Day = 3.50 Catch per Angler Hour = 1.54
 Kg per Angler Day = 1.23 Kg per Angler Hour = 0.54

* Weight estimated from length-to-weight regression if available.

Table 3. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 26
 Total Hours Effort for Anglers Intercepted = 59.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Seaperch, White	1	18.07	61	74.4	51	0.30	290	16
Perch, Pile	2	7.22	9	11.0	9	0.80	363	24
Seaperch, Striped	3	2.83	7	8.5	7	0.40	289	31
Cabezon	4	0.51	1	1.2	1	0.51	307	0
Surfperch, Silver	5	0.44	3	3.7	3	0.15	209	18
Greenling, Kelp	6	0.14	1	1.2	1	0.14	212	0
Total		29.21	82	100	72			

C. CPUE***

Catch per Angler Day = 3.15 Catch per Angler Hour = 1.39
 Kg per Angler Day = 1.12 Kg per Angler Hour = 0.50

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 4. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 210
 Total Hours Effort for Anglers Intercepted = 540.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Greenling, Kelp	1	86	30.8
Rockfish, Grass	2	34	12.2
Seaperch, Striped	3	29	10.4
Cabezon	4	25	9.0
Surfperch, Redtail	5	18	6.5
Greenling, Rock	6	15	5.4
Rockfish, Black	7	9	3.2
Rockfish, Blue	8	8	2.9
Lingcod	9	8	2.9
Perch, Pile	10	8	2.9
Rockfish, Brown	11	6	2.2
Surfperch, Silver	12	6	2.2
Rockfish, Copper	13	4	1.4
Sculpin, Buffalo	14	4	1.4
Seaperch, White	15	4	1.4
Prickleback, Monkeyface	16	4	1.4
Skate, Big	17	2	0.7
Sculpins	18	2	0.7
Prickleback, Rock	19	2	0.7
Salmon, Coho (Silver)	20	1	0.4
Irish Lord, Red	21	1	0.4
Surfperch, Walleye	22	1	0.4
Surfperch, Calico	23	1	0.4
Sole, Sand	24	1	0.4
Total		279	100

C. CPUE

Catch per Angler Day = 1.33 Catch per Angler Hour = 0.52

Table 5. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 210
 Total Hours Effort for Anglers Intercepted = 540.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Greenling, Kelp	1	60	30.6	0.21	12.55
Seaperch, Striped	2	27	13.8	0.38	10.17
Cabazon	3	18	9.2	0.86	15.47
Surfperch, Redtail	4	18	9.2	0.52	9.30
Rockfish, Grass	5	16	8.2	0.54	8.59
Greenling, Rock	6	15	7.7	0.33	4.99
Perch, Pile	7	8	4.1	0.80	6.37
Lingcod	8	6	3.1	4.48	26.89
Surfperch, Silver	9	6	3.1	0.19	1.14
Rockfish, Black	10	5	2.6	0.32	1.58
Rockfish, Blue	11	5	2.6	0.14	0.69
Seaperch, White	12	4	2.0	0.37	1.46
Skate, Big	13	1	0.5	21.54	21.54
Rockfish, Brown	14	1	0.5	0.55	0.55
Rockfish, Copper	15	1	0.5	0.39	0.39
Sculpin, Buffalo	16	1	0.5	0.22	0.22
Surfperch, Walleye	17	1	0.5	0.34	0.34
Surfperch, Calico	18	1	0.5	0.30	0.30
Prickleback, Monkeyface	19	1	0.5	0.00**	0.00
Sole, Sand	20	1	0.5	0.02	0.02
Total		196	100		122.56

C. CPUE

Catch per Angler Day = 0.93 Catch per Angler Hour = 0.36
 Kg per Angler Day = 0.58 Kg per Angler Hour = 0.23

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 6. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 210
 Total Hours Effort for Anglers Intercepted = 540.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Lingcod	1	26.89	6	4.3	6	4.48	734	98
Skate, Big	2	21.54	1	0.7	1	21.54	1362	0
Cabezon	3	12.03	14	10.1	14	0.86	347	106
Greenling, Kelp	4	8.16	39	28.1	39	0.21	230	57
Rockfish, Grass	5	8.05	15	10.8	15	0.54	269	78
Seaperch, Striped	6	5.65	15	10.8	15	0.38	279	42
Greenling, Rock	7	4.66	14	10.1	14	0.33	279	48
Perch, Pile	8	3.98	5	3.6	5	0.80	362	27
Surfperch, Redtail	9	3.10	6	4.3	6	0.52	307	33
Rockfish, Black	10	1.58	5	3.6	5	0.32	253	91
Surfperch, Silver	11	0.95	5	3.6	5	0.19	226	18
Seaperch, White	12	0.73	2	1.4	2	0.37	312	23
Rockfish, Blue	13	0.69	5	3.6	5	0.14	204	31
Rockfish, Brown	14	0.55	1	0.7	1	0.55	315	0
Rockfish, Copper	15	0.39	1	0.7	1	0.39	277	0
Surfperch, Walleye	16	0.34	1	0.7	1	0.34	260	0
Surfperch, Calico	17	0.30	1	0.7	1	0.30	262	0
Sculpin, Buffalo	18	0.22	1	0.7	1	0.22	281	0
Sole, Sand	19	0.02	1	0.7	1	0.02	128	0
Prickleback, Monkeyface	20	0.00	1	0.7	1	0.00	332	0
Total		99.83	139	100	139			

C. CPUE***

Catch per Angler Day = 0.66 Catch per Angler Hour = 0.26
 Kg per Angler Day = 0.48 Kg per Angler Hour = 0.18

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 7. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 146
 Total Hours Effort for Anglers Intercepted = 351.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Surfperch, Silver	1	76	30.8
Surfperch, Redtail	2	43	17.4
Seaperch, White	3	28	11.3
Seaperch, Striped	4	23	9.3
Greenling, Kelp	5	22	8.9
Perch, Pile	6	11	4.5
Cabezon	7	10	4.0
Salmon, Coho (Silver)	8	5	2.0
Greenling, Rock	9	4	1.6
Lingcod	10	4	1.6
Rockfish, Brown	11	3	1.2
Surfperch, Walleye	12	3	1.2
Tomcod, Pacific	13	2	0.8
Rockfish, Grass	14	2	0.8
Sculpin, Pacific Staghorn	15	2	0.8
Trout, Rainbow	16	1	0.4
Rockfish, Copper	17	1	0.4
Sculpins	18	1	0.4
Sculpin, Buffalo	19	1	0.4
Wolf-eel	20	1	0.4
Prickleback, Rock	21	1	0.4
Prickleback, Monkeyface	22	1	0.4
Sole, Rock	23	1	0.4
Sole, Sand	24	1	0.4
Total		247	100

C. CPUE

Catch per Angler Day = 1.69 Catch per Angler Hour = 0.70

Table 8. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 146
 Total Hours Effort for Anglers Intercepted = 351.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Surfperch, Silver	1	46	28.8	0.16	7.32
Surfperch, Redtail	2	36	22.5	0.34	12.24
Seaperch, White	3	25	15.6	0.30	7.60
Seaperch, Striped	4	15	9.4	0.44	6.66
Perch, Pile	5	10	6.3	0.60	6.03
Greenling, Kelp	6	7	4.4	0.32	2.25
Greenling, Rock	7	4	2.5	0.25	1.01
Lingcod	8	4	2.5	3.59	14.36
Surfperch, Walleye	9	3	1.9	0.32	0.97
Salmon, Coho (Silver)	10	2	1.3	0.91	1.82
Tomcod, Pacific	11	2	1.3	0.12	0.23
Rockfish, Brown	12	1	0.6	0.51**	0.51
Rockfish, Copper	13	1	0.6	0.56	0.56
Rockfish, Grass	14	1	0.6	0.75	0.75
Cabezon	15	1	0.6	0.36	0.36
Prickleback, Rock	16	1	0.6	0.00**	0.00
Prickleback, Monkeyface	17	1	0.6	0.00**	0.00
Total		160	100		62.67

C. CPUE

Catch per Angler Day = 1.10 Catch per Angler Hour = 0.46
 Kg per Angler Day = 0.43 Kg per Angler Hour = 0.18

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 9. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 146
 Total Hours Effort for Anglers Intercepted = 351.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Lingcod	1	14.36	4	2.6	4	3.59	684	86
Surfperch, Redtail	2	12.24	36	23.4	36	0.34	269	32
Seaperch, White	3	7.60	25	16.2	22	0.30	292	16
Surfperch, Silver	4	7.00	44	28.6	43	0.16	212	23
Seaperch, Striped	5	6.66	15	9.7	15	0.44	300	12
Perch, Pile	6	6.03	10	6.5	10	0.60	330	29
Greenling, Kelp	7	1.93	6	3.9	6	0.32	277	45
Salmon, Coho (Silver)	8	1.82	2	1.3	2	0.91	459	16
Greenling, Rock	9	1.01	4	2.6	4	0.25	255	45
Surfperch, Walleye	10	0.97	3	1.9	3	0.32	257	9
Rockfish, Grass	11	0.75	1	0.6	1	0.75	322	0
Rockfish, Copper	12	0.56	1	0.6	1	0.56	313	0
Cabazon	13	0.36	1	0.6	1	0.36	268	0
Tomcod, Pacific	14	0.23	2	1.3	2	0.12	243	44
Total		61.52	154	100	150			

C. CPUE***

Catch per Angler Day = 1.05 Catch per Angler Hour = 0.44
 Kg per Angler Day = 0.42 Kg per Angler Hour = 0.18

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 10. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 43
 Total Hours Effort for Anglers Intercepted = 133.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Black	1	62	48.4
Lingcod	2	25	19.5
Rockfish, Blue	3	9	7.0
Greenling, Kelp	4	7	5.5
Rockfish, Canary	5	4	3.1
Sanddab, Pacific	6	4	3.1
Sanddab, Speckled	7	4	3.1
Sole, Petrale	8	3	2.3
Rockfish, China	9	2	1.6
Cabazon	10	2	1.6
Ray, Bat	11	1	0.8
Rockfish, Yelloweye	12	1	0.8
Sculpin, Pacific Staghorn	13	1	0.8
Seaperch, Striped	14	1	0.8
Surfperch, Redtail	15	1	0.8
Sole, Sand	16	1	0.8
Total		128	100

C. CPUE

Catch per Angler Day = 2.98 Catch per Angler Hour = 0.96

Table 11. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 43
 Total Hours Effort for Anglers Intercepted = 133.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Black	1	47	43.9	0.89	41.61
Lingcod	2	25	23.4	5.50	137.39
Rockfish, Blue	3	9	8.4	0.38	3.41
Rockfish, Canary	4	4	3.7	0.74	2.96
Sanddab, Pacific	5	4	3.7	0.09	0.34
Sanddab, Speckled	6	4	3.7	0.09	0.34
Greenling, Kelp	7	3	2.8	0.42	1.25
Sole, Petrale	8	3	2.8	0.60	1.81
Rockfish, China	9	2	1.9	0.62	1.23
Cabazon	10	2	1.9	2.85	5.70
Rockfish, Yelloweye	11	1	0.9	5.95	5.95
Sculpin, Pacific Staghorn	12	1	0.9	0.21	0.21
Surfperch, Redtail	13	1	0.9	0.53	0.53
Sole, Sand	14	1	0.9	0.09	0.09
Total		107	100		202.82

C. CPUE

Catch per Angler Day = 2.49 Catch per Angler Hour = 0.80
 Kg per Angler Day = 4.72 Kg per Angler Hour = 1.52

* Weight estimated from length-to-weight regression if available.

Table 12. Sampled Effort, Ranked Catch and CPUE for Area 1 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 43
 Total Hours Effort for Anglers Intercepted = 133.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Lingcod	1	137.39	25	25.8	23	5.50	769	147
Rockfish, Black	2	36.30	41	42.3	13	0.89	384	49
Rockfish, Yelloweye	3	5.95	1	1.0	1	5.95	680	0
Cabazon	4	5.70	2	2.1	2	2.85	575	33
Rockfish, Blue	5	2.27	6	6.2	6	0.38	284	55
Rockfish, Canary	6	2.22	3	3.1	3	0.74	362	66
Sole, Petrale	7	1.81	3	3.1	3	0.60	359	47
Greenling, Kelp	8	1.25	3	3.1	3	0.42	309	20
Rockfish, China	9	1.23	2	2.1	2	0.62	322	6
Surfperch, Redtail	10	0.53	1	1.0	1	0.53	312	0
Sanddab, Pacific	11	0.34	4	4.1	4	0.09	200	13
Sanddab, Speckled	12	0.34	4	4.1	4	0.09	188	21
Sculpin, Pacific Staghorn	13	0.21	1	1.0	1	0.21	274	0
Sole, Sand	14	0.09	1	1.0	1	0.09	201	0
Total		195.63	97	100	67			

C. CPUE***

Catch per Angler Day = 2.26 Catch per Angler Hour = 0.73
 Kg per Angler Day = 4.55 Kg per Angler Hour = 1.47

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 13. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 14
 Total Hours Effort for Anglers Intercepted = 24.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Seaperch, White	1	2	66.7
Jacksmelt	2	1	33.3
Total		3	100

C. CPUE

Catch per Angler Day = 0.21 Catch per Angler Hour = 0.12

Figure 2. Length-Frequency Histogram for White Seaperch
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

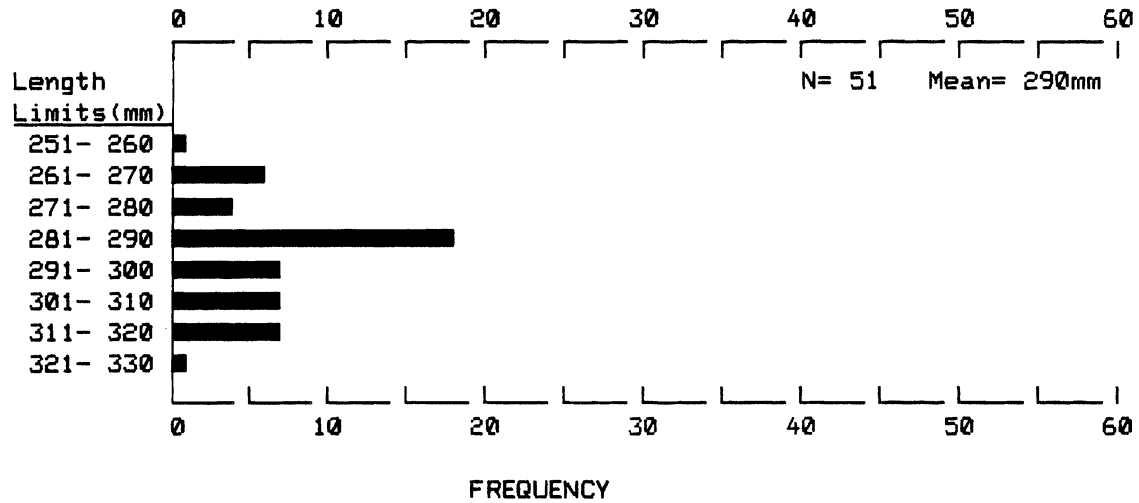


Table 14. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 14
 Total Hours Effort for Anglers Intercepted = 24.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Seaperch, White	1	2	66.7	0.17	0.35
Jacksmelt	2	1	33.3	0.35	0.35
Total		3	100		0.70

C. CPUE

Catch per Angler Day = 0.21 Catch per Angler Hour = 0.12
 Kg per Angler Day = 0.05 Kg per Angler Hour = 0.03

* Weight estimated from length-to-weight regression if available.

Table 15. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 14
 Total Hours Effort for Anglers Intercepted = 24.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Jacksmelt	1	0.35	1	33.3	1	0.35	355	0
Seaperch, White	2	0.35	2	66.7	2	0.17	242	23
Total		0.70	3	100	3			

C. CPUE***

Catch per Angler Day = 0.21 Catch per Angler Hour = 0.12
 Kg per Angler Day = 0.05 Kg per Angler Hour = 0.03

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 16. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 94
 Total Hours Effort for Anglers Intercepted = 191.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Greenling, Kelp	1	3	21.4
Seaperch, Striped	2	3	21.4
Unidentified Fishes	3	2	14.3
Sculpins	4	2	14.3
Jacksmelt	5	1	7.1
Lingcod	6	1	7.1
Cabezon	7	1	7.1
Seaperch, White	8	1	7.1
Total		14	100

C. CPUE

Catch per Angler Day = 0.15 Catch per Angler Hour = 0.07

Table 17. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 94
 Total Hours Effort for Anglers Intercepted = 191.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Greenling, Kelp	1	3	27.3	0.18	0.55
Seaperch, Striped	2	3	27.3	0.31	0.92
Jacksmelt	3	1	9.1	0.45	0.45
Lingcod	4	1	9.1	1.53	1.53
Sculpins	5	1	9.1	0.28**	0.28
Cabazon	6	1	9.1	0.15	0.15
Seaperch, White	7	1	9.1	0.31	0.31
Total		11	100		4.19

C. CPUE

Catch per Angler Day = 0.12 Catch per Angler Hour = 0.06
 Kg per Angler Day = 0.04 Kg per Angler Hour = 0.02

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 18. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 94
 Total Hours Effort for Anglers Intercepted = 191.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	----Mean----		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Lingcod	1	1.53	1	10.0	1	1.53	520	0
Seaperch, Striped	2	0.92	3	30.0	3	0.31	266	17
Greenling, Kelp	3	0.55	3	30.0	3	0.18	214	81
Jacksmelt	4	0.45	1	10.0	1	0.45	381	0
Seaperch, White	5	0.31	1	10.0	1	0.31	296	0
Cabezon	6	0.15	1	10.0	1	0.15	195	0
Total		3.91	10	100	10			

C. CPUE***

Catch per Angler Day = 0.11 Catch per Angler Hour = 0.05
 Kg per Angler Day = 0.04 Kg per Angler Hour = 0.02

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 19. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 81
 Total Hours Effort for Anglers Intercepted = 199.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Cabazon	1	9	30.0
Greenling, Kelp	2	6	20.0
Surfperch, Calico	3	5	16.7
Greenlings (general)	4	3	10.0
Unidentified Fishes	5	2	6.7
Sculpin, Buffalo	6	2	6.7
Rockfish, Grass	7	1	3.3
Sculpins	8	1	3.3
Surfperch, Redtail	9	1	3.3
Total		30	100

C. CPUE

Catch per Angler Day = 0.37 Catch per Angler Hour = 0.15

Table 20. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 81
 Total Hours Effort for Anglers Intercepted = 199.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Cabezon	1	8	30.8	1.16	9.28
Greenling, Kelp	2	5	19.2	0.58	2.88
Surfperch, Calico	3	5	19.2	0.20	1.00
Greenlings (general)	4	3	11.5	0.39**	1.17
Sculpin, Buffalo	5	2	7.7	0.44	0.88
Rockfish, Grass	6	1	3.8	0.80	0.80
Sculpins	7	1	3.8	0.25**	0.25
Surfperch, Redtail	8	1	3.8	0.60	0.60
Total		26	100		16.86

C. CPUE

Catch per Angler Day = 0.32 Catch per Angler Hour = 0.13
 Kg per Angler Day = 0.21 Kg per Angler Hour = 0.08

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 21. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 81
 Total Hours Effort for Anglers Intercepted = 199.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Cabazon	1	5.80	5	26.3	5	1.16	403	81
Greenling, Kelp	2	2.88	5	26.3	5	0.58	343	37
Surfperch, Calico	3	1.00	5	26.3	5	0.20	227	32
Sculpin, Buffalo	4	0.88	2	10.5	2	0.44	356	3
Rockfish, Grass	5	0.80	1	5.3	1	0.80	329	0
Surfperch, Redtail	6	0.60	1	5.3	1	0.60	325	0
Total		11.96	19	100	19			

C. CPUE***

Catch per Angler Day = 0.23 Catch per Angler Hour = 0.10
 Kg per Angler Day = 0.15 Kg per Angler Hour = 0.06

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 22. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Beach or Bank Anglers Using Spear Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 5
 Total Hours Effort for Anglers Intercepted = 7.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Seaperch, Striped	1	3	50.0
Rockfish, Blue	2	1	16.7
Rockfish, Grass	3	1	16.7
Greenling, Kelp	4	1	16.7
Total		6	100

C. CPUE

Catch per Angler Day = 1.20 Catch per Angler Hour = 0.80

Table 23. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Beach or Bank Anglers Using Spear Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 5
 Total Hours Effort for Anglers Intercepted = 7.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Seaperch, Striped	1	3	50.0	0.56	1.69
Rockfish, Blue	2	1	16.7	0.23	0.23
Rockfish, Grass	3	1	16.7	2.87	2.87
Greenling, Kelp	4	1	16.7	0.70	0.70
Total		6	100		5.49

C. CPUE

Catch per Angler Day = 1.20 Catch per Angler Hour = 0.80
 Kg per Angler Day = 1.10 Kg per Angler Hour = 0.73

* Weight estimated from length-to-weight regression if available.

Table 24. Sampled Effort, Ranked Catch and CPUE for Area 2 in 1985 for Quarter 1, by Beach or Bank Anglers Using Spear Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 5
 Total Hours Effort for Anglers Intercepted = 7.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Grass	1	2.87	1	16.7	1	2.87	488	0
Seaperch, Striped	2	1.69	3	50.0	3	0.56	325	1
Greenling, Kelp	3	0.70	1	16.7	1	0.70	370	0
Rockfish, Blue	4	0.23	1	16.7	1	0.23	247	0
Total		5.49	6	100	6			

C. CPUE***

Catch per Angler Day = 1.20 Catch per Angler Hour = 0.80
 Kg per Angler Day = 1.10 Kg per Angler Hour = 0.73

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 25. Sampled Effort, Ranked Catch and CPUE for Area 045 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 65
 Total Hours Effort for Anglers Intercepted = 217.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	157	60.6
Lingcod	2	48	18.5
Rockfish, Canary	3	10	3.9
Rockfish, Black	4	8	3.1
Rockfish, Vermilion	5	7	2.7
Rockfish, China	6	6	2.3
Cabazon	7	6	2.3
Rockfish, Rosy	8	5	1.9
Rockfish, Yelloweye	9	4	1.5
Rockfish, Copper	10	3	1.2
Rockfish, Yellowtail	11	3	1.2
Greenling, Kelp	12	2	0.8
Total		259	100

C. CPUE

Catch per Angler Day = 3.98 Catch per Angler Hour = 1.19

Table 26. Sampled Effort, Ranked Catch and CPUE for Area 045 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 65
 Total Hours Effort for Anglers Intercepted = 217.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Blue	1	157	62.3	0.58	90.81
Lingcod	2	41	16.3	3.50	143.58
Rockfish, Canary	3	10	4.0	0.71	7.13
Rockfish, Black	4	8	3.2	0.67	5.37
Rockfish, Vermillion	5	7	2.8	2.00	13.99
Rockfish, China	6	6	2.4	0.95	5.70
Cabezon	7	6	2.4	1.77	10.64
Rockfish, Rosy	8	5	2.0	0.37	1.83
Rockfish, Yelloweye	9	4	1.6	0.39	1.56
Rockfish, Copper	10	3	1.2	1.07	3.21
Rockfish, Yellowtail	11	3	1.2	0.79	2.37
Greenling, Kelp	12	2	0.8	0.64	1.29
Total		252	100		287.47

C. CPUE

Catch per Angler Day = 3.88 Catch per Angler Hour = 1.16
 Kg per Angler Day = 4.42 Kg per Angler Hour = 1.32

* Weight estimated from length-to-weight regression if available.

Table 27. Sampled Effort, Ranked Catch and CPUE for Area 045 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 65
 Total Hours Effort for Anglers Intercepted = 217.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Lingcod	1	115.56	33	14.2	31	3.50	672	103
Rockfish, Blue	2	83.87	145	62.5	93	0.58	326	58
Rockfish, Vermilion	3	13.99	7	3.0	7	2.00	485	99
Cabezon	4	10.64	6	2.6	6	1.77	473	86
Rockfish, Canary	5	7.13	10	4.3	10	0.71	337	100
Rockfish, China	6	5.70	6	2.6	6	0.95	366	36
Rockfish, Black	7	5.37	8	3.4	7	0.67	353	25
Rockfish, Copper	8	3.21	3	1.3	3	1.07	383	50
Rockfish, Yellowtail	9	2.37	3	1.3	3	0.79	365	94
Rockfish, Rosy	10	1.83	5	2.2	5	0.37	281	15
Rockfish, Yelloweye	11	1.56	4	1.7	4	0.39	277	31
Greenling, Kelp	12	1.29	2	0.9	2	0.64	356	51
Total		252.51	232	100	177			

C. CPUE***

Catch per Angler Day = 3.57 Catch per Angler Hour = 1.07
 Kg per Angler Day = 3.88 Kg per Angler Hour = 1.16

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 28. Sampled Effort, Ranked Catch and CPUE for Area 045 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 16
 Total Hours Effort for Anglers Intercepted = 64.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	208	92.4
Rockfish, Canary	2	8	3.6
Rockfish, Yellowtail	3	6	2.7
Lingcod	4	2	0.9
Rockfish, Yelloweye	5	1	0.4
Total		225	100

C. CPUE

Catch per Angler Day = 14.06 Catch per Angler Hour = 3.52

Table 29. Sampled Effort, Ranked Catch and CPUE for Area 045 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 16
 Total Hours Effort for Anglers Intercepted = 64.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Blue	1	208	92.4	0.66	137.65
Rockfish, Canary	2	8	3.6	0.43	3.43
Rockfish, Yellowtail	3	6	2.7	0.75	4.50
Lingcod	4	2	0.9	4.33	8.65
Rockfish, Yelloweye	5	1	0.4	0.91	0.91
Total		225	100		155.14

C. CPUE

Catch per Angler Day = 14.06 Catch per Angler Hour = 3.52
 Kg per Angler Day = 9.70 Kg per Angler Hour = 2.42

* Weight estimated from length-to-weight regression if available.

Table 30. Sampled Effort, Ranked Catch and CPUE for Area 045 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 16
 Total Hours Effort for Anglers Intercepted = 64.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Blue	1	137.65	208	92.4	154	0.66	347	44
Lingcod	2	8.65	2	0.9	2	4.33	735	53
Rockfish, Yellowtail	3	4.50	6	2.7	6	0.75	354	93
Rockfish, Canary	4	3.43	8	3.6	8	0.43	301	56
Rockfish, Yelloweye	5	0.91	1	0.4	1	0.91	368	0
Total		155.14	225	100	171			

C. CPUE***

Catch per Angler Day = 14.06 Catch per Angler Hour = 3.52
 Kg per Angler Day = 9.70 Kg per Angler Hour = 2.42

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Figure 3. Length-Frequency Histogram for Blue Rockfish
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 045, Quarter 1, 1985.

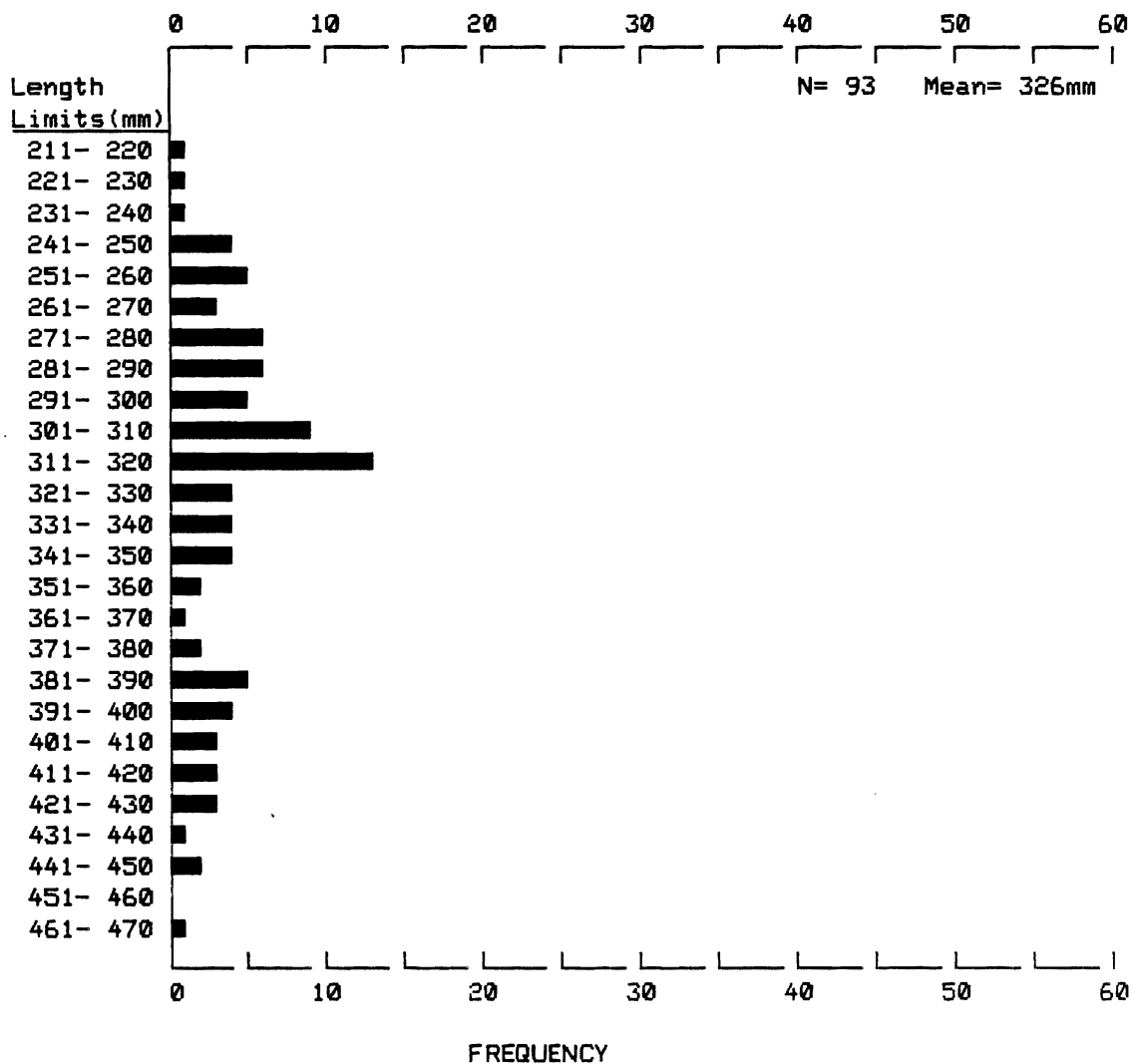


Figure 4. Length-Frequency Histogram for Blue Rockfish
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 045, Quarter 1, 1985.

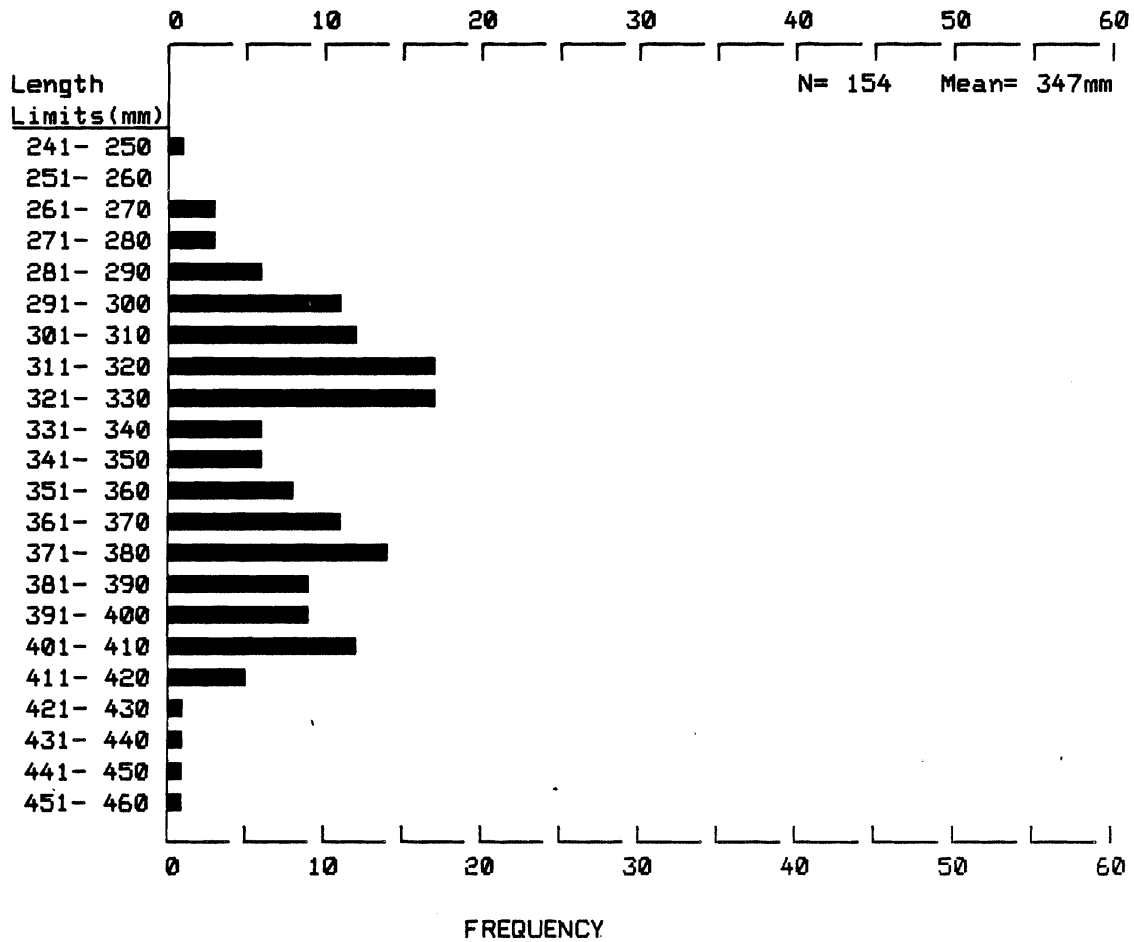


Table 31. Sampled Effort, Ranked Catch and CPUE for Area 097 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 11
 Total Hours Effort for Anglers Intercepted = 35.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Copper	1	6	37.5
Lingcod	2	4	25.0
Rockfish, Brown	3	2	12.5
Rockfish, Rosy	4	2	12.5
Rockfish, Gopher	5	1	6.3
Halibut, California	6	1	6.3
Total		16	100

C. CPUE

Catch per Angler Day = 1.45 Catch per Angler Hour = 0.46

Table 32. Sampled Effort, Ranked Catch and CPUE for Area 097 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 11
 Total Hours Effort for Anglers Intercepted = 35.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Copper	1	6	37.5	0.52	3.09
Lingcod	2	4	25.0	1.25	5.00
Rockfish, Brown	3	2	12.5	0.41	0.81
Rockfish, Rosy	4	2	12.5	0.19	0.37
Rockfish, Gopher	5	1	6.3	0.68	0.68
Halibut, California	6	1	6.3	6.80	6.80
Total		16	100		16.75

C. CPUE

Catch per Angler Day = 1.45 Catch per Angler Hour = 0.46
 Kg per Angler Day = 1.52 Kg per Angler Hour = 0.48

* Weight estimated from length-to-weight regression if available.

Table 33. Sampled Effort, Ranked Catch and CPUE for Area 097
in 1985 for Quarter 1, by Private or Rental Boat Anglers Using
Hook-and-Line Gear. Catch Represents Only the Fish
Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 11
Total Hours Effort for Anglers Intercepted = 35.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Halibut, California	1	6.80	1	6.3	1	6.80	862	0
Lingcod	2	5.00	4	25.0	4	1.25	481	56
Rockfish, Copper	3	3.09	6	37.5	6	0.52	301	34
Rockfish, Brown	4	0.81	2	12.5	2	0.41	282	20
Rockfish, Gopher	5	0.68	1	6.3	1	0.68	350	0
Rockfish, Rosy	6	0.37	2	12.5	2	0.19	224	28
Total		16.75	16	100	16			

C. CPUE***

Catch per Angler Day = 1.45 Catch per Angler Hour = 0.46
Kg per Angler Day = 1.52 Kg per Angler Hour = 0.48

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 34. Sampled Effort, Ranked Catch and CPUE for Area 097 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 39
 Total Hours Effort for Anglers Intercepted = 140.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	249	55.3
Rockfish, Yellowtail	2	133	29.6
Rockfish, Black	3	13	2.9
Rockfish, Brown	4	8	1.8
Rockfish, Canary	5	7	1.6
Chilipepper	6	6	1.3
Rockfish, Speckled	7	6	1.3
Rockfish, Starry	8	5	1.1
Bocaccio	9	4	0.9
Rockfish, Olive	10	4	0.9
Rockfish, China	11	3	0.7
Rockfish, Greenspotted	12	3	0.7
Lingcod	13	3	0.7
Rockfish, Vermilion	14	2	0.4
Rockfish, Quillback	15	1	0.2
Rockfish, Rosy	16	1	0.2
Rockfish, Yelloweye	17	1	0.2
Mackerel, Pacific (Chub)	18	1	0.2
Total		450	100

C. CPUE

Catch per Angler Day = 11.54 Catch per Angler Hour = 3.21

Table 35. Sampled Effort, Ranked Catch and CPUE for Area 097 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 39
 Total Hours Effort for Anglers Intercepted = 140.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Blue	1	249	55.3	0.62	155.11
Rockfish, Yellowtail	2	133	29.6	1.01	134.86
Rockfish, Black	3	13	2.9	1.13	14.70
Rockfish, Brown	4	8	1.8	0.85	6.82
Rockfish, Canary	5	7	1.6	1.59	11.15
Chilipepper	6	6	1.3	1.00	6.02
Rockfish, Speckled	7	6	1.3	0.85	5.07
Rockfish, Starry	8	5	1.1	0.77	3.83
Bocaccio	9	4	0.9	2.77	11.09
Rockfish, Olive	10	4	0.9	0.66	2.64
Rockfish, China	11	3	0.7	0.62	1.86
Rockfish, Greenspotted	12	3	0.7	0.71	2.12
Lingcod	13	3	0.7	4.12	12.37
Rockfish, Vermilion	14	2	0.4	3.39	6.77
Rockfish, Quillback	15	1	0.2	0.84	0.84
Rockfish, Rosy	16	1	0.2	0.16	0.16
Rockfish, Yelloweye	17	1	0.2	2.59	2.59
Mackerel, Pacific (Chub)	18	1	0.2	0.55	0.55
Total		450	100		378.54

C. CPUE

Catch per Angler Day = 11.54 Catch per Angler Hour = 3.21
 Kg per Angler Day = 9.71 Kg per Angler Hour = 2.70

* Weight estimated from length-to-weight regression if available.

Table 36. Sampled Effort, Ranked Catch and CPUE for Area 097 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 39
 Total Hours Effort for Anglers Intercepted = 140.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Blue	1	155.11	249	55.3	197	0.62	340	41
Rockfish, Yellowtail	2	134.86	133	29.6	129	1.01	409	42
Rockfish, Black	3	14.70	13	2.9	13	1.13	420	40
Lingcod	4	12.37	3	0.7	3	4.12	708	138
Rockfish, Canary	5	11.15	7	1.6	7	1.59	457	103
Bocaccio	6	11.09	4	0.9	4	2.77	635	42
Rockfish, Brown	7	6.82	8	1.8	8	0.85	362	31
Rockfish, Vermilion	8	6.77	2	0.4	2	3.39	599	30
Chilipepper	9	6.02	6	1.3	7	1.00	430	30
Rockfish, Speckled	10	5.07	6	1.3	6	0.85	383	48
Rockfish, Starry	11	3.83	5	1.1	5	0.77	356	25
Rockfish, Olive	12	2.64	4	0.9	4	0.66	358	76
Rockfish, Yelloweye	13	2.59	1	0.2	1	2.59	518	0
Rockfish, Greenspotted	14	2.12	3	0.7	3	0.71	353	9
Rockfish, China	15	1.86	3	0.7	3	0.62	322	19
Rockfish, Quillback	16	0.84	1	0.2	1	0.84	348	0
Mackerel, Pacific (Chub)	17	0.55	1	0.2	1	0.55	343	0
Rockfish, Rosy	18	0.16	1	0.2	1	0.16	214	0
Total		378.54	450	100	395			

C. CPUE***

Catch per Angler Day = 11.54 Catch per Angler Hour = 3.21
 Kg per Angler Day = 9.71 Kg per Angler Hour = 2.70

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Figure 5. Length-Frequency Histogram for Blue Rockfish
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 097, Quarter 1, 1985.

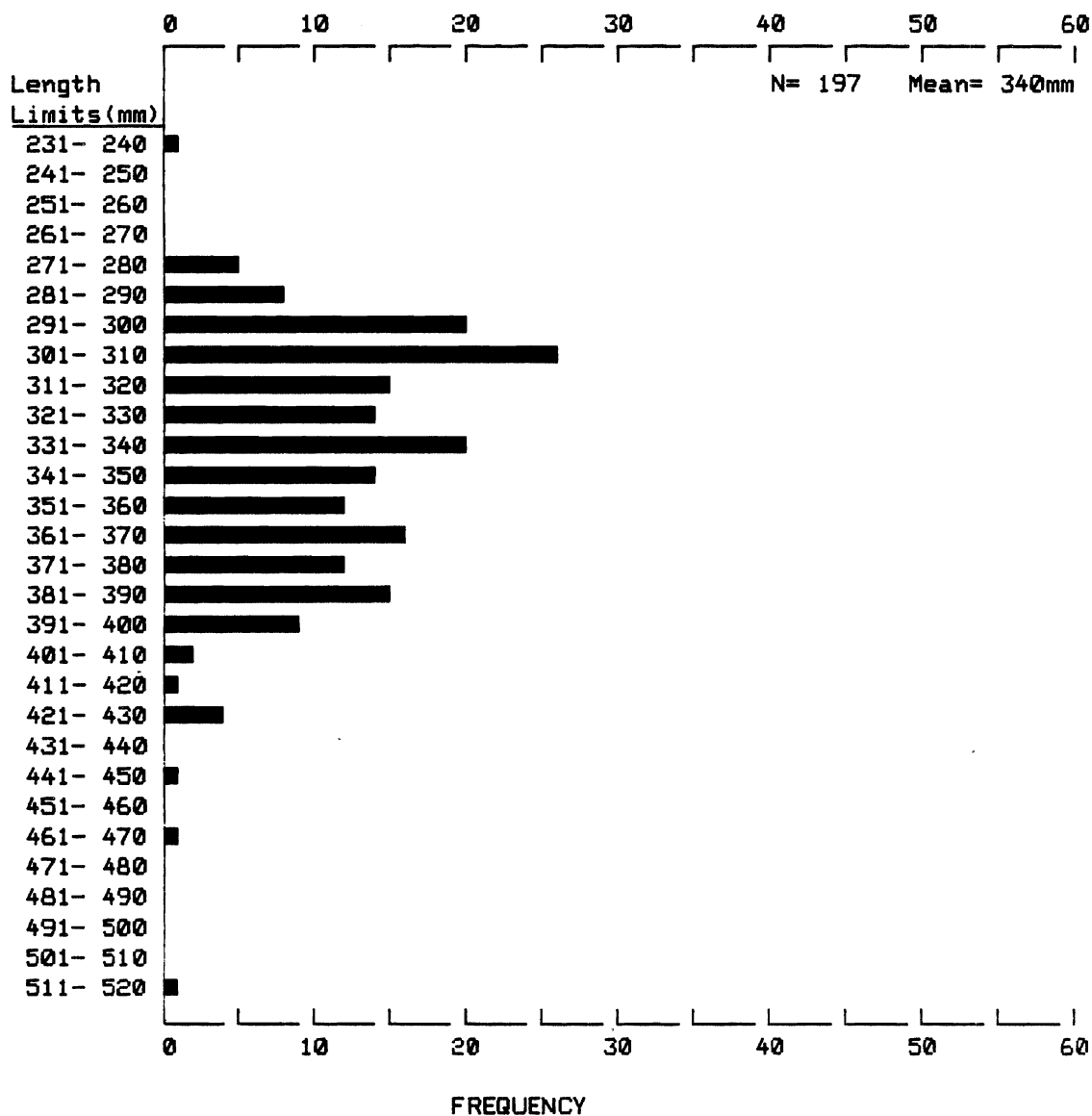


Figure 6. Length-Frequency Histogram for Yellowtail Rockfish
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 097, Quarter 1, 1985.

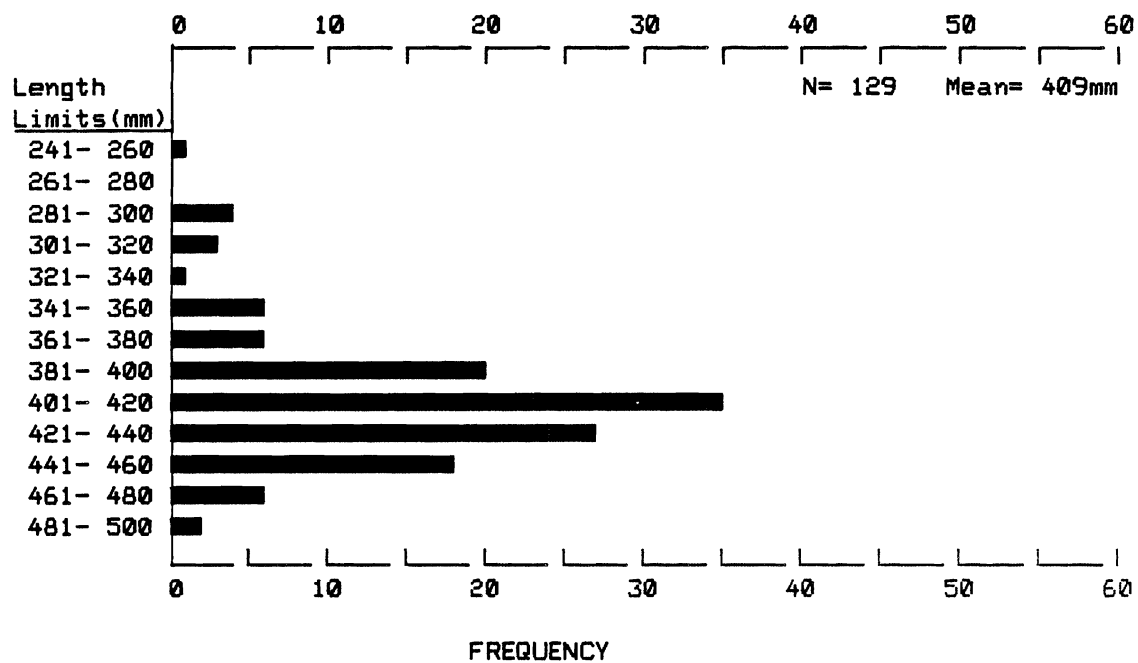


Table 37. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 11
 Total Hours Effort for Anglers Intercepted = 76.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Kelp	1	2	33.3
Lingcod	2	2	33.3
Rockfishes (general)	3	1	16.7
Rockfish, Brown	4	1	16.7
Total		6	100

C. CPUE

Catch per Angler Day = 0.55 Catch per Angler Hour = 0.08

Table 38. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 11
 Total Hours Effort for Anglers Intercepted = 76.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Kelp	1	2	40.0	0.52	1.04
Rockfishes (general)	2	1	20.0	0.15	0.15
Rockfish, Brown	3	1	20.0	0.20	0.20
Lingcod	4	1	20.0	3.78	3.78
Total		5	100		5.17

C. CPUE

Catch per Angler Day = 0.45 Catch per Angler Hour = 0.07
 Kg per Angler Day = 0.47 Kg per Angler Hour = 0.07

* Weight estimated from length-to-weight regression if available.

Table 39. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 11
 Total Hours Effort for Anglers Intercepted = 76.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Lingcod	1	3.78	1	20.0	1	3.78	704	0
Rockfish, Kelp	2	1.04	2	40.0	2	0.52	313	100
Rockfish, Brown	3	0.20	1	20.0	1	0.20	221	0
Rockfishes (general)	4	0.15	1	20.0	1	0.15	230	0
Total		5.17	5	100	5			

C. CPUE***

Catch per Angler Day = 0.45 Catch per Angler Hour = 0.07
 Kg per Angler Day = 0.47 Kg per Angler Hour = 0.07

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 40. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 17
 Total Hours Effort for Anglers Intercepted = 58.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Cabazon	1	3	23.1
Seaperch, Striped	2	3	23.1
Lingcod	3	2	15.4
Jacksmelt	4	1	7.7
Rockfishes (unidentified)	5	1	7.7
Rockfish, Blue	6	1	7.7
Greenlings (general)	7	1	7.7
Surfperches	8	1	7.7
Total		13	100

C. CPUE

Catch per Angler Day = 0.76 Catch per Angler Hour = 0.22

Table 41. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 17
 Total Hours Effort for Anglers Intercepted = 58.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Cabezon	1	3	23.1	0.05	0.16
Seaperch, Striped	2	3	23.1	0.12	0.37
Lingcod	3	2	15.4	0.05	0.10
Jacksmelt	4	1	7.7	0.03	0.03
Rockfishes (unidentified)	5	1	7.7	0.03	0.03
Rockfish, Blue	6	1	7.7	0.01	0.01
Greenlings (general)	7	1	7.7	0.20	0.20
Surfperches	8	1	7.7	0.32**	0.32
Total		13	100		1.22

C. CPUE

Catch per Angler Day = 0.76 Catch per Angler Hour = 0.22
 Kg per Angler Day = 0.07 Kg per Angler Hour = 0.02

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 42. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 17
 Total Hours Effort for Anglers Intercepted = 58.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Seaperch, Striped	1	0.37	3	23.1	3	0.12	191	40
Greenlings (general)	2	0.20	1	7.7	1	0.20	238	0
Cabezon	3	0.16	3	23.1	3	0.05	132	28
Lingcod	4	0.10	2	15.4	2	0.05	162	0
Jacksmelt	5	0.03	1	7.7	1	0.03	174	0
Rockfishes (unidentified)	6	0.03	1	7.7	1	0.03	135	0
Rockfish, Blue	7	0.01	1	7.7	1	0.01	96	0
Surfperches	8	0.00	1	7.7	1	0.00	158	0
Total		0.90	13	100	13			

C. CPUE***

Catch per Angler Day = 0.76 Catch per Angler Hour = 0.22
 Kg per Angler Day = 0.05 Kg per Angler Hour = 0.02

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 43. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 10
 Total Hours Effort for Anglers Intercepted = 66.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	22	56.4
Rockfishes (general)	2	10	25.6
Rockfish, Canary	3	3	7.7
Rockfish, Brown	4	2	5.1
Rockfish, Yellowtail	5	1	2.6
Flounder, Starry	6	1	2.6
Total		39	100

C. CPUE

Catch per Angler Day = 3.90 Catch per Angler Hour = 0.59

Table 44. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 10
 Total Hours Effort for Anglers Intercepted = 66.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt.(kg)*	Weight Caught
Rockfish, Blue	1	22	75.9	0.29	6.28
Rockfish, Canary	2	3	10.3	0.15	0.44
Rockfish, Brown	3	2	6.9	0.22	0.44
Rockfish, Yellowtail	4	1	3.4	0.14	0.14
Flounder, Starry	5	1	3.4	0.44	0.44
Total		29	100		7.74

C. CPUE

Catch per Angler Day = 2.90 Catch per Angler Hour = 0.44
 Kg per Angler Day = 0.77 Kg per Angler Hour = 0.12

* Weight estimated from length-to-weight regression if available.

Table 45. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 10
 Total Hours Effort for Anglers Intercepted = 66.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Blue	1	6.28	22	75.9	17	0.29	258	44
Rockfish, Brown	2	0.44	2	6.9	2	0.22	228	21
Rockfish, Canary	3	0.44	3	10.3	3	0.15	218	7
Flounder, Starry	4	0.44	1	3.4	1	0.44	335	0
Rockfish, Yellowtail	5	0.14	1	3.4	1	0.14	217	0
Total		7.74	29	100	24			

C. CPUE***

Catch per Angler Day = 2.90 Catch per Angler Hour = 0.44
 Kg per Angler Day = 0.77 Kg per Angler Hour = 0.12

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 46. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 21
 Total Hours Effort for Anglers Intercepted = 114.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	79	30.4
Rockfish, Yellowtail	2	42	16.2
Rockfishes (general)	3	34	13.1
Rockfish, Olive	4	20	7.7
Rockfish, Black	5	18	6.9
Mackerel, Pacific (Chub)	6	16	6.2
Rockfish, Vermilion	7	15	5.8
Rockfish, Canary	8	14	5.4
Bocaccio	9	8	3.1
Chilipepper	10	6	2.3
Rockfish, Copper	11	2	0.8
Rockfish, Rosy	12	2	0.8
Rockfish, Brown	13	1	0.4
Rockfish, Starry	14	1	0.4
Greenling, Kelp	15	1	0.4
Flounders, Righteye	16	1	0.4
Total		260	100

C. CPUE

Catch per Angler Day = 12.38 Catch per Angler Hour = 2.27

Table 47. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 21
 Total Hours Effort for Anglers Intercepted = 114.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Blue	1	79	37.6	0.39	30.57
Rockfish, Yellowtail	2	42	20.0	0.45	18.78
Rockfish, Olive	3	20	9.5	0.35	6.90
Rockfish, Black	4	18	8.6	1.32	23.73
Rockfish, Vermilion	5	15	7.1	0.36	5.45
Rockfish, Canary	6	14	6.7	0.19	2.67
Bocaccio	7	8	3.8	1.55	12.38
Chilipepper	8	6	2.9	0.90	5.37
Rockfish, Copper	9	2	1.0	0.79	1.57
Rockfish, Rosy	10	2	1.0	0.27	0.54
Rockfish, Brown	11	1	0.5	0.28	0.28
Rockfish, Starry	12	1	0.5	0.93	0.93
Greenling, Kelp	13	1	0.5	0.27	0.27
Flounders, Righteye	14	1	0.5	0.27	0.27
Total		210	100		109.71

C. CPUE

Catch per Angler Day = 10.00 Catch per Angler Hour = 1.83
 Kg per Angler Day = 5.22 Kg per Angler Hour = 0.96

* Weight estimated from length-to-weight regression if available.

Table 48. Sampled Effort, Ranked Catch and CPUE for Area 3 (Ocean) in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 21
 Total Hours Effort for Anglers Intercepted = 114.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Blue	1	30.57	79	37.6	74	0.39	284	55
Rockfish, Black	2	23.73	18	8.6	18	1.32	438	62
Rockfish, Yellowtail	3	18.78	42	20.0	46	0.45	311	39
Bocaccio	4	12.38	8	3.8	8	1.55	508	107
Rockfish, Olive	5	6.90	20	9.5	20	0.35	296	41
Rockfish, Vermilion	6	5.45	15	7.1	15	0.36	270	52
Chilipepper	7	5.37	6	2.9	6	0.90	414	35
Rockfish, Canary	8	2.67	14	6.7	14	0.19	236	17
Rockfish, Copper	9	1.57	2	1.0	2	0.79	349	27
Rockfish, Starry	10	0.93	1	0.5	1	0.93	380	0
Rockfish, Rosy	11	0.54	2	1.0	2	0.27	255	14
Rockfish, Brown	12	0.28	1	0.5	1	0.28	250	0
Greenling, Kelp	13	0.27	1	0.5	1	0.27	267	0
Flounders, Righteye	14	0.27	1	0.5	1	0.27	283	0
Total		109.71	210	100	209			

C. CPUE***

Catch per Angler Day = 10.00 Catch per Angler Hour = 1.83
 Kg per Angler Day = 5.22 Kg per Angler Hour = 0.96

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Figure 7. Length-Frequency Histogram for Blue Rockfish
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 3 (Ocean), Quarter 1, 1985.

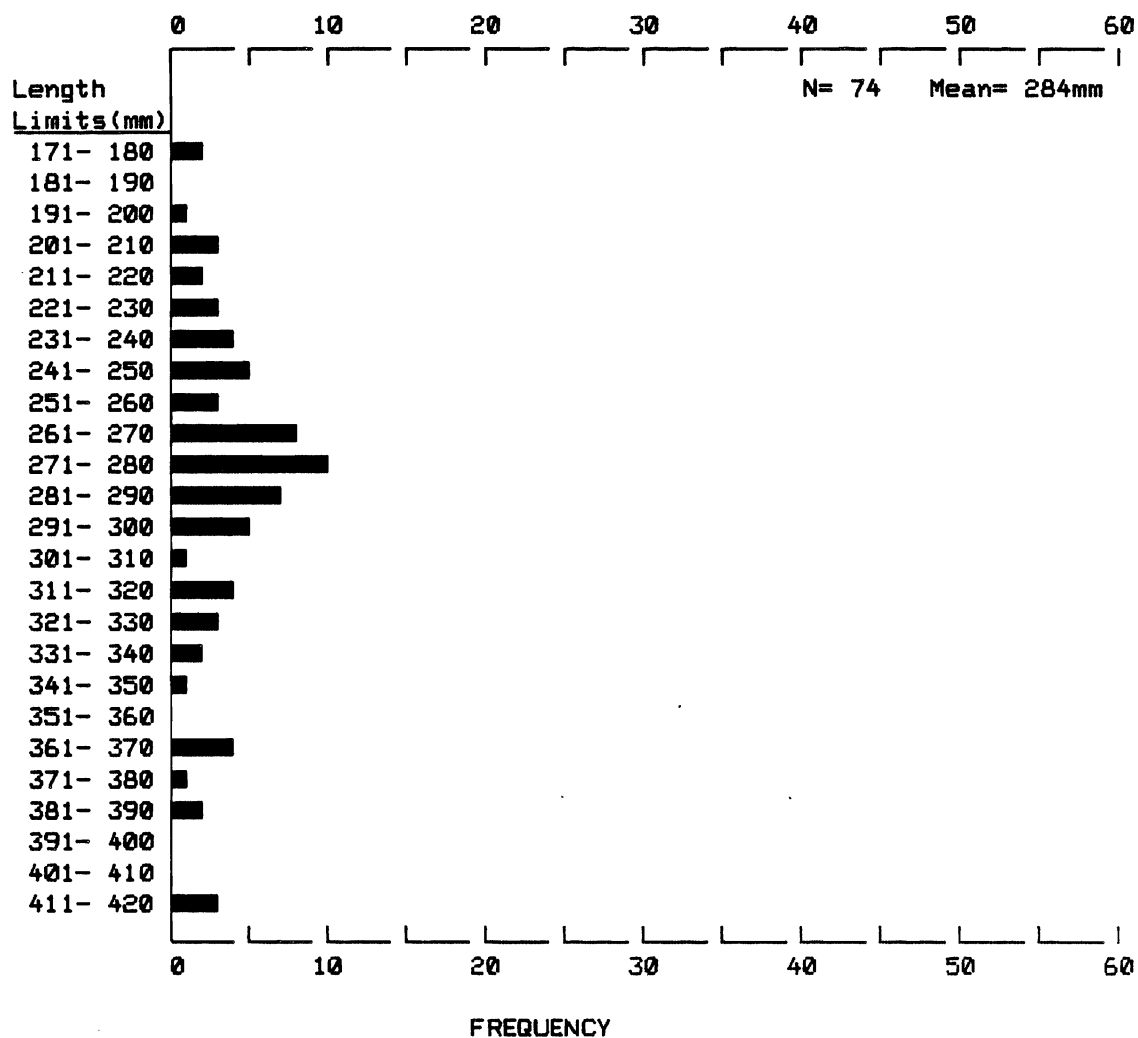


Figure 8. Length-Frequency Histogram for Yellowtail Rockfish
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 3 (Ocean), Quarter 1, 1985.

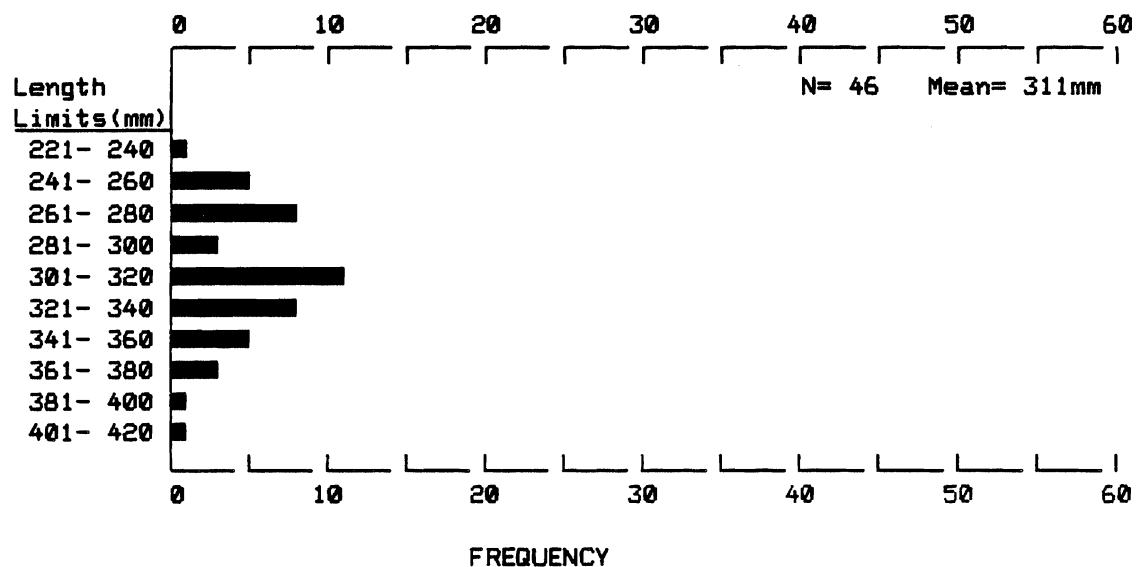


Table 48. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 122
 Total Hours Effort for Anglers Intercepted = 402.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Sculpin, Pacific Staghorn	1	19	46.3
Surfperch, Silver	2	7	17.1
Bass, Striped	3	3	7.3
Surfperches	4	3	7.3
Sanddab, Pacific	5	3	7.3
Perch, Black	6	2	4.9
Perch, Pile	7	2	4.9
Greenlings (general)	8	1	2.4
Seaperch, White	9	1	2.4
Total		41	100

C. CPUE

Catch per Angler Day = 0.34 Catch per Angler Hour = 0.10

Table 49. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 122
 Total Hours Effort for Anglers Intercepted = 402.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Surfperch, Silver	1	7	50.0	0.51	3.54
Bass, Striped	2	2	14.3	1.68	3.35
Perch, Black	3	2	14.3	0.49	0.98
Perch, Pile	4	2	14.3	0.46	0.92
Seaperch, White	5	1	7.1	0.21	0.21
Total		14	100		9.00

C. CPUE

Catch per Angler Day = 0.11 Catch per Angler Hour = 0.03
 Kg per Angler Day = 0.07 Kg per Angler Hour = 0.02

* Weight estimated from length-to-weight regression if available.

Table 50. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 122
 Total Hours Effort for Anglers Intercepted = 402.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Surfperch, Silver	1	3.54	7	50.0	7	0.51	305	30
Bass, Striped	2	3.35	2	14.3	2	1.68	644	149
Perch, Black	3	0.98	2	14.3	2	0.49	312	6
Perch, Pile	4	0.92	2	14.3	2	0.46	304	22
Seaperch, White	5	0.21	1	7.1	1	0.21	258	0
Total		9.00	14	100	14			

C. CPUE***

Catch per Angler Day = 0.11 Catch per Angler Hour = 0.03
 Kg per Angler Day = 0.07 Kg per Angler Hour = 0.02

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 51. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 9
 Total Hours Effort for Anglers Intercepted = 26.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number

Total		0	0

C. CPUE

Catch per Angler Day = 0.00 Catch per Angler Hour = 0.00

Table 52. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 9
 Total Hours Effort for Anglers Intercepted = 26.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt.(kg)*	Weight Caught
<hr/>					
Total		0	0		0.00

C. CPUE

Catch per Angler Day = 0.00 Catch per Angler Hour = 0.00
 Kg per Angler Day = 0.00 Kg per Angler Hour = 0.00

* Weight estimated from length-to-weight regression if available.

Table 53. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 9
 Total Hours Effort for Anglers Intercepted = 26.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Total		0.00	0	0	0			

C. CPUE***

Catch per Angler Day = 0.00 Catch per Angler Hour = 0.00
 Kg per Angler Day = 0.00 Kg per Angler Hour = 0.00

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 54. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 44
 Total Hours Effort for Anglers Intercepted = 170.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Sculpin, Pacific Staghorn	1	12	70.6
Shark, Leopard	2	2	11.8
Rockfish, Brown	3	2	11.8
Perch, Pile	4	1	5.9
Total		17	100

C. CPUE

Catch per Angler Day = 0.39 Catch per Angler Hour = 0.10

Table 55. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 44
 Total Hours Effort for Anglers Intercepted = 170.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt.(kg)*	Weight Caught
Rockfish, Brown	1	2	66.7	0.05	0.09
Perch, Pile	2	1	33.3	0.62	0.62
Total		3	100		0.71

C. CPUE

Catch per Angler Day = 0.07 Catch per Angler Hour = 0.02
 Kg per Angler Day = 0.02 Kg per Angler Hour = 0.00

* Weight estimated from length-to-weight regression if available.

Table 56. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 44
 Total Hours Effort for Anglers Intercepted = 170.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Perch, Pile	1	0.62	1	33.3	1	0.62	335	0
Rockfish, Brown	2	0.09	2	66.7	2	0.05	134	8
Total		0.71	3	100	3			

C. CPUE***

Catch per Angler Day = 0.07 Catch per Angler Hour = 0.02
 Kg per Angler Day = 0.02 Kg per Angler Hour = 0.00

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 57. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 209
 Total Hours Effort for Anglers Intercepted = 1209.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Sculpin, Pacific Staghorn	1	119	38.6
Shark, Leopard	2	37	12.0
Sharks	3	25	8.1
Rockfishes (general)	4	21	6.8
Flounder, Starry	5	17	5.5
Perch, Pile	6	13	4.2
Croaker, White	7	12	3.9
Rockfish, Brown	8	10	3.2
Skates	9	9	2.9
Stingrays	10	9	2.9
Sturgeon, White	11	9	2.9
Smoothhound, Gray	12	7	2.3
Sturgeons (general)	13	7	2.3
Sturgeons (unidentified)	14	3	1.0
Bass, Striped	15	2	0.6
Surfperches	16	2	0.6
Surfperch, Silver	17	2	0.6
Skate, Big	18	1	0.3
Skate, California	19	1	0.3
Sturgeon, Green	20	1	0.3
Surfperch, Barred	21	1	0.3
Total		308	100

C. CPUE

Catch per Angler Day = 1.47 Catch per Angler Hour = 0.25

Table 58. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 209
 Total Hours Effort for Anglers Intercepted = 1209.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Shark, Leopard	1	16	23.5	1.96	31.41
Perch, Pile	2	12	17.6	0.78	9.30
Rockfish, Brown	3	9	13.2	0.23	2.06
Sturgeon, White	4	8	11.8	13.90	111.16
Sculpin, Pacific Staghorn	5	7	10.3	0.07	0.48
Croaker, White	6	7	10.3	0.40	2.81
Flounder, Starry	7	3	4.4	0.59	1.76
Surfperch, Silver	8	2	2.9	0.34	0.68
Skate, California	9	1	1.5	3.77	3.77
Sturgeon, Green	10	1	1.5	12.74	12.74
Bass, Striped	11	1	1.5	1.96	1.96
Surfperch, Barred	12	1	1.5	0.67	0.67
Total		68	100		178.80

C. CPUE

Catch per Angler Day = 0.33 Catch per Angler Hour = 0.06
 Kg per Angler Day = 0.86 Kg per Angler Hour = 0.15

* Weight estimated from length-to-weight regression if available.

Table 59. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 209
 Total Hours Effort for Anglers Intercepted = 1209.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Sturgeon, White	1	111.16	8	12.1	8	13.90	1283	117
Shark, Leopard	2	31.41	16	24.2	16	1.96	569	103
Sturgeon, Green	3	12.74	1	1.5	1	12.74	1260	0
Perch, Pile	4	9.30	12	18.2	12	0.78	355	44
Skate, California	5	3.77	1	1.5	1	3.77	748	0
Croaker, White	6	2.81	7	10.6	7	0.40	325	31
Rockfish, Brown	7	2.06	9	13.6	9	0.23	224	46
Bass, Striped	8	1.96	1	1.5	1	1.96	697	0
Flounder, Starry	9	1.76	3	4.5	3	0.59	359	55
Surfperch, Silver	10	0.68	2	3.0	2	0.34	273	0
Surfperch, Barred	11	0.67	1	1.5	1	0.67	326	0
Sculpin, Pacific Staghorn	12	0.34	5	7.6	5	0.07	187	12
Total		178.66	66	100	66			

C. CPUE***

Catch per Angler Day = 0.32 Catch per Angler Hour = 0.05
 Kg per Angler Day = 0.85 Kg per Angler Hour = 0.15

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 60. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 54
 Total Hours Effort for Anglers Intercepted = 349.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Sculpin, Pacific Staghorn	1	29	65.9
Smoothhound, Gray	2	3	6.8
Croaker, White	3	3	6.8
Sturgeon, White	4	2	4.5
Shark, Sevengill	5	1	2.3
Shark, Leopard	6	1	2.3
Stingrays	7	1	2.3
Eagle Rays	8	1	2.3
Sturgeons (unidentified)	9	1	2.3
Flounders, Lefteye	10	1	2.3
Flounder, Starry	11	1	2.3
Total		44	100

C. CPUE

Catch per Angler Day = 0.81 Catch per Angler Hour = 0.13

Table 61. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 54
 Total Hours Effort for Anglers Intercepted = 349.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Smoothhound, Gray	1	3	50.0	5.54	16.62
Sturgeon, White	2	2	33.3	12.63	25.25
Flounders, Lefteye	3	1	16.7	0.00**	0.00
Total		6	100		41.87

C. CPUE

Catch per Angler Day = 0.11 Catch per Angler Hour = 0.02
 Kg per Angler Day = 0.78 Kg per Angler Hour = 0.12

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 62. Sampled Effort, Ranked Catch and CPUE for Area 3 (Bay) in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 54
 Total Hours Effort for Anglers Intercepted = 349.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Sturgeon, White	1	25.25	2	33.3	2	12.63	1252	100
Smoothhound, Gray	2	16.62	3	50.0	3	5.54	839	55
Flounders, Lefteye	3	0.00	1	16.7	1	0.00	454	0
Total		41.87	6	100	6			

C. CPUE***

Catch per Angler Day = 0.11 Catch per Angler Hour = 0.02
 Kg per Angler Day = 0.78 Kg per Angler Hour = 0.12

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 63. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 65
 Total Hours Effort for Anglers Intercepted = 217.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Surfperch, Walleye	1	100	45.5
Surfperches	2	43	19.5
Seaperch, White	3	26	11.8
Jacksmelt	4	15	6.8
Surfperch, Barred	5	13	5.9
Rockfish, Brown	6	7	3.2
Senorita	7	6	2.7
Sharks	8	1	0.5
Rockfish, Kelp	9	1	0.5
Sculpin, Pacific Staghorn	10	1	0.5
Cabazon	11	1	0.5
Croaker, White	12	1	0.5
Perch, Black	13	1	0.5
Surfperch, Silver	14	1	0.5
Perch, Pile	15	1	0.5
Surfperch, Calico	16	1	0.5
Flatfishes	17	1	0.5
Total		220	100

C. CPUE

Catch per Angler Day = 3.38 Catch per Angler Hour = 1.01

Table 64. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 65
 Total Hours Effort for Anglers Intercepted = 217.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Surfperch, Walleye	1	33	37.1	0.09	3.05
Seaperch, White	2	16	18.0	0.16	2.63
Jacksmelt	3	15	16.9	0.01	0.12
Surfperch, Barred	4	12	13.5	0.14	1.68
Rockfish, Brown	5	3	3.4	0.14	0.42
Surfperches	6	3	3.4	0.14**	0.42
Rockfish, Kelp	7	1	1.1	0.11	0.11
Sculpin, Pacific Staghorn	8	1	1.1	0.02**	0.02
Croaker, White	9	1	1.1	0.14**	0.14
Perch, Black	10	1	1.1	0.28	0.28
Surfperch, Silver	11	1	1.1	0.16	0.16
Perch, Pile	12	1	1.1	0.35	0.35
Surfperch, Calico	13	1	1.1	0.24	0.24
Total		89	100		9.62

C. CPUE

Catch per Angler Day = 1.37 Catch per Angler Hour = 0.41
 Kg per Angler Day = 0.15 Kg per Angler Hour = 0.04

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 65. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 65
 Total Hours Effort for Anglers Intercepted = 217.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Seaperch, White	1	2.63	16	28.1	16	0.16	236	24
Surfperch, Walleye	2	2.04	22	38.6	12	0.09	182	13
Rockfish, Brown	3	0.42	3	5.3	3	0.14	197	11
Perch, Pile	4	0.35	1	1.8	1	0.35	280	0
Perch, Black	5	0.28	1	1.8	1	0.28	251	0
Surfperch, Barred	6	0.28	2	3.5	2	0.14	197	8
Surfperch, Calico	7	0.24	1	1.8	1	0.24	246	0
Surfperch, Silver	8	0.16	1	1.8	1	0.16	215	0
Rockfish, Kelp	9	0.11	1	1.8	1	0.11	188	0
Jacksmelt	10	0.07	9	15.8	9	0.01	112	14
Total		6.58	57	100	47			

C. CPUE***

Catch per Angler Day = 0.88 Catch per Angler Hour = 0.26
 Kg per Angler Day = 0.10 Kg per Angler Hour = 0.03

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 66. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 7
 Total Hours Effort for Anglers Intercepted = 13.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Surfperch, Walleye	1	2	50.0
Surfperches	2	1	25.0
Surfperch, Barred	3	1	25.0
Total		4	100

C. CPUE

Catch per Angler Day = 0.57 Catch per Angler Hour = 0.31

Table 67. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 7
 Total Hours Effort for Anglers Intercepted = 13.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Surfperch, Walleye	1	2	66.7	0.18	0.35
Surfperch, Barred	2	1	33.3	0.15**	0.15
Total		3	100		0.50

C. CPUE

Catch per Angler Day = 0.43 Catch per Angler Hour = 0.23
 Kg per Angler Day = 0.07 Kg per Angler Hour = 0.04

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 68. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Jetty or Breakwater Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 7
 Total Hours Effort for Anglers Intercepted = 13.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Surfperch, Walleye	1	0.35	2	%100.0	2	0.18	218	17
Total		0.35	2	100	2			

C. CPUE***

Catch per Angler Day = 0.29 Catch per Angler Hour = 0.15
 Kg per Angler Day = 0.05 Kg per Angler Hour = 0.03

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 69. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 75
 Total Hours Effort for Anglers Intercepted = 208.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Surfperch, Barred	1	82	75.9
Surfperches	2	12	11.1
Surfperch, Silver	3	9	8.3
Surfperch, Calico	4	2	1.9
Sharks	5	1	0.9
Surfperch, Walleye	6	1	0.9
Perch, Pile	7	1	0.9
Total		108	100

C. CPUE

Catch per Angler Day = 1.44 Catch per Angler Hour = 0.52

Table 70. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 75
 Total Hours Effort for Anglers Intercepted = 208.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Surfperch, Barred	1	73	84.9	0.24	17.83
Surfperch, Silver	2	9	10.5	0.12	1.09
Surfperch, Calico	3	2	2.3	0.18	0.36
Surfperch, Walleye	4	1	1.2	0.13	0.13
Perch, Pile	5	1	1.2	0.84	0.84
Total		86	100		20.25

C. CPUE

Catch per Angler Day = 1.15 Catch per Angler Hour = 0.41
 Kg per Angler Day = 0.27 Kg per Angler Hour = 0.10

* Weight estimated from length-to-weight regression if available.

Table 71. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 75
 Total Hours Effort for Anglers Intercepted = 208.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Surfperch, Barred	1	17.83	73	84.9	67	0.24	228	40
Surfperch, Silver	2	1.09	9	10.5	9	0.12	197	11
Perch, Pile	3	0.84	1	1.2	1	0.84	370	0
Surfperch, Calico	4	0.36	2	2.3	2	0.18	222	25
Surfperch, Walleye	5	0.13	1	1.2	1	0.13	200	0
Total		20.25	86	100	80			

C. CPUE***

Catch per Angler Day = 1.15 Catch per Angler Hour = 0.41
 Kg per Angler Day = 0.27 Kg per Angler Hour = 0.10

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 72. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 80
 Total Hours Effort for Anglers Intercepted = 335.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	118	20.9
Rockfishes (unidentified)	2	104	18.4
Rockfish, Brown	3	84	14.9
Croaker, White	4	58	10.3
Rockfish, Gopher	5	43	7.6
Rockfish, Black	6	30	5.3
Rockfish, Yellowtail	7	24	4.2
Rockfish, Canary	8	19	3.4
Rockfish, Copper	9	11	1.9
Rockfish, Black-and-yellow	10	11	1.9
Sanddab, Pacific	11	10	1.8
Mackerel, Pacific (Chub)	12	9	1.6
Rockfish, Kelp	13	8	1.4
Rockfish, Vermilion	14	7	1.2
Rockfish, Olive	15	7	1.2
Rockfish, Rosy	16	5	0.9
Lingcod	17	5	0.9
Unidentified Fishes	18	4	0.7
Rockfish, China	19	2	0.4
Rockfish, Grass	20	2	0.4
Rockfish, Quillback	21	1	0.2
Greenling, Kelp	22	1	0.2
Seaperch, Sharpnose	23	1	0.2
Flatfishes	24	1	0.2
Total		565	100

C. CPUE

Catch per Angler Day = 7.06 Catch per Angler Hour = 1.69

Table 73. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 80
 Total Hours Effort for Anglers Intercepted = 335.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Blue	1	95	24.6	0.32	30.26
Rockfish, Brown	2	84	21.8	0.49	41.41
Rockfish, Gopher	3	43	11.1	0.31	13.17
Rockfish, Black	4	30	7.8	0.40	12.09
Rockfish, Yellowtail	5	24	6.2	0.23	5.53
Rockfish, Canary	6	19	4.9	0.27	5.09
Rockfishes (unidentified)	7	15	3.9	0.38**	5.70
Croaker, White	8	13	3.4	0.22	2.90
Rockfish, Copper	9	11	2.8	0.43	4.74
Rockfish, Black-and-yellow	10	11	2.8	0.38	4.13
Rockfish, Kelp	11	8	2.1	0.40	3.21
Rockfish, Vermilion	12	7	1.8	0.95	6.68
Rockfish, Olive	13	7	1.8	0.64	4.46
Rockfish, Rosy	14	4	1.0	0.16	0.65
Lingcod	15	4	1.0	3.11	12.44
Mackerel, Pacific (Chub)	16	3	0.8	0.37	1.11
Rockfish, China	17	2	0.5	0.17	0.33
Rockfish, Grass	18	2	0.5	0.72	1.43
Rockfish, Quillback	19	1	0.3	0.23	0.23
Greenling, Kelp	20	1	0.3	0.23	0.23
Seaperch, Sharpnose	21	1	0.3	0.17	0.17
Sanddab, Pacific	22	1	0.3	0.05	0.05
Total		386	100		156.02

C. CPUE

Catch per Angler Day = 4.83 Catch per Angler Hour = 1.15
 Kg per Angler Day = 1.95 Kg per Angler Hour = 0.47

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 74. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 80
 Total Hours Effort for Anglers Intercepted = 335.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Brown	1	37.96	77	21.8	64	0.49	293	55
Rockfish, Blue	2	29.31	92	26.1	48	0.32	268	40
Rockfish, Gopher	3	13.17	43	12.2	38	0.31	263	32
Lingcod	4	12.44	4	1.1	4	3.11	646	108
Rockfish, Black	5	9.27	23	6.5	23	0.40	296	26
Rockfish, Vermilion	6	6.68	7	2.0	7	0.95	375	76
Rockfish, Yellowtail	7	5.53	24	6.8	20	0.23	252	21
Rockfish, Canary	8	5.09	19	5.4	19	0.27	260	37
Rockfish, Copper	9	4.74	11	3.1	11	0.43	278	51
Rockfish, Olive	10	4.46	7	2.0	7	0.64	358	58
Rockfish, Black-and-yellow	11	4.13	11	3.1	11	0.38	269	24
Rockfish, Kelp	12	3.21	8	2.3	8	0.40	299	16
Croaker, White	13	2.68	12	3.4	12	0.22	269	19
Rockfish, Grass	14	1.43	2	0.6	2	0.72	313	53
Mackerel, Pacific (Chub)	15	1.11	3	0.8	3	0.37	305	13
Rockfish, Rosy	16	0.65	4	1.1	4	0.16	216	5
Rockfish, China	17	0.33	2	0.6	2	0.17	214	9
Rockfish, Quillback	18	0.23	1	0.3	1	0.23	225	0
Greenling, Kelp	19	0.23	1	0.3	1	0.23	250	0
Seaperch, Sharpnose	20	0.17	1	0.3	1	0.17	240	0
Sanddab, Pacific	21	0.05	1	0.3	1	0.05	170	0
Total		142.87	353	100	287			

C. CPUE***

Catch per Angler Day = 4.41 Catch per Angler Hour = 1.05
 Kg per Angler Day = 1.79 Kg per Angler Hour = 0.43

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 75. Sampled Effort, Ranked Catch and CPUE for Area 4
in 1985 for Quarter 1, by Private or Rental Boat Anglers Using
Spear Gear. Catch Represents All Fish Captured,
Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 5
Total Hours Effort for Anglers Intercepted = 5.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Lingcod	1	8	57.1
Cabezon	2	4	28.6
Rockfish, Vermilion	3	2	14.3
Total		14	100

C. CPUE

Catch per Angler Day = 2.80 Catch per Angler Hour = 2.80

Table 76. Sampled Effort, Ranked Catch and CPUE for Area 4
in 1985 for Quarter 1, by Private or Rental Boat Anglers Using
Spear Gear. Catch Represents Number Landed
and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 5
Total Hours Effort for Anglers Intercepted = 5.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Lingcod	1	8	57.1	2.82	22.55
Cabezón	2	4	28.6	1.56	6.23
Rockfish, Vermilion	3	2	14.3	2.46	4.92
Total		14	100		33.70

C. CPUE

Catch per Angler Day = 2.80 Catch per Angler Hour = 2.80
Kg per Angler Day = 6.74 Kg per Angler Hour = 6.74

* Weight estimated from length-to-weight regression if available.

Table 77. Sampled Effort, Ranked Catch and CPUE for Area 4
in 1985 for Quarter 1, by Private or Rental Boat Anglers Using
Spear Gear. Catch Represents Only the Fish
Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 5
Total Hours Effort for Anglers Intercepted = 5.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Lingcod	1	22.55	8	57.1	8	2.82	630	76
Cabezon	2	6.23	4	28.6	4	1.56	459	41
Rockfish, Vermilion	3	4.92	2	14.3	2	2.46	535	52
Total		33.70	14	100	14			

C. CPUE***

Catch per Angler Day = 2.80 Catch per Angler Hour = 2.80
Kg per Angler Day = 6.74 Kg per Angler Hour = 6.74

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 78. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted	=	146
Total Hours Effort for Anglers Intercepted	=	563.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	503	19.7
Rockfish, Yellowtail	2	429	16.8
Mackerel, Pacific (Chub)	3	278	10.9
Rockfishes (unidentified)	4	225	8.8
Rockfish, Widow	5	219	8.6
Bocaccio	6	159	6.2
Chilipepper	7	151	5.9
Rockfish, Rosy	8	138	5.4
Rockfish, Greenspotted	9	95	3.7
Rockfish, Greenstriped	10	56	2.2
Rockfish, Starry	11	46	1.8
Rockfish, Canary	12	43	1.7
Rockfish, Squarespot	13	42	1.6
Rockfish, Speckled	14	34	1.3
Rockfish, Brown	15	20	0.8
Rockfish, Olive	16	17	0.7
Croaker, White	17	16	0.6
Jack Mackerel	18	12	0.5
Rockfish, Rosethorn	19	11	0.4
Lingcod	20	10	0.4
Rockfish, Black	21	7	0.3
Rockfish, Vermilion	22	7	0.3
Rockfish, Yelloweye	23	6	0.2
Rockfish, Stripetail	24	6	0.2
Sanddab, Pacific	25	5	0.2
Rockfish, Splitnose	26	4	0.2

(Table 78. - continued)

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Flag	27	4	0.2
Sole, Rock	28	4	0.2
Rockfish, China	29	3	0.1
Rockfish, Copper	30	2	0.1
Rockfish, Sharpchin	31	2	0.1
Rockfish, Gopher	32	2	0.1
Rockfish, Swordspine	33	1	0.0
Total		2557	100

C. CPUE

Catch per Angler Day = 17.51 Catch per Angler Hour = 4.54

Table 79. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 146
 Total Hours Effort for Anglers Intercepted = 563.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Blue	1	471	20.9	0.28	131.96
Rockfish, Yellowtail	2	423	18.8	0.56	237.18
Rockfish, Widow	3	219	9.7	0.37	81.85
Mackerel, Pacific (Chub)	4	191	8.5	0.43	82.57
Bocaccio	5	159	7.1	0.46	72.50
Chilipepper	6	149	6.6	0.64	94.85
Rockfish, Rosy	7	128	5.7	0.20	25.52
Rockfish, Greenspotted	8	95	4.2	0.64	61.16
Rockfishes (unidentified)	9	73	3.2	0.44**	32.12
Rockfish, Greenstriped	10	56	2.5	0.26	14.69
Rockfish, Starry	11	46	2.0	0.41	19.08
Rockfish, Canary	12	43	1.9	0.62	26.77
Rockfish, Squarespot	13	42	1.9	0.19	8.07
Rockfish, Speckled	14	34	1.5	0.56	18.88
Rockfish, Brown	15	20	0.9	0.93	18.61
Rockfish, Olive	16	17	0.8	0.54	9.26
Jack Mackerel	17	12	0.5	0.56	6.66
Rockfish; Rosethorn	18	11	0.5	0.23	2.55
Lingcod	19	8	0.4	3.87	30.94
Rockfish, Black	20	7	0.3	0.70	4.89
Rockfish, Vermilion	21	7	0.3	1.20	8.41
Rockfish, Yelloweye	22	6	0.3	2.46	14.76
Rockfish, Stripetail	23	6	0.3	0.27	1.61
Rockfish, Splitnose	24	4	0.2	0.40	1.58
Rockfish, Flag	25	4	0.2	0.68	2.72
Sanddab, Pacific	26	4	0.2	0.11	0.44
Sole, Rock	27	4	0.2	0.75	3.01

(Table 79. - continued)

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, China	28	3	0.1	0.52	1.55
Rockfish, Copper	29	2	0.1	0.50	1.00
Rockfish, Sharpchin	30	2	0.1	0.00**	0.00
Rockfish, Gopher	31	2	0.1	0.32	0.63
Croaker, White	32	2	0.1	0.29	0.57
Rockfish, Swordspine	33	1	0.0	0.18	0.18
Total		2251	100		1016.56

C. CPUE

Catch per Angler Day = 15.42 Catch per Angler Hour = 4.00
 Kg per Angler Day = 6.96 Kg per Angler Hour = 1.81

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 80. Sampled Effort, Ranked Catch and CPUE for Area 4 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 146
 Total Hours Effort for Anglers Intercepted = 563.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Yellowtail	1	233.25	416	20.0	312	0.56	324	70
Rockfish, Blue	2	131.96	471	22.6	245	0.28	259	36
Chilipepper	3	94.85	149	7.2	91	0.64	368	49
Rockfish, Widow	4	81.11	217	10.4	186	0.37	307	31
Bocaccio	5	72.50	159	7.6	158	0.46	317	108
Rockfish, Greenspotted	6	61.16	95	4.6	90	0.64	337	45
Mackerel, Pacific (Chub)	7	44.53	103	4.9	74	0.43	318	22
Lingcod	8	30.94	8	0.4	8	3.87	701	82
Rockfish, Canary	9	26.77	43	2.1	43	0.62	337	65
Rockfish, Rosy	10	25.52	128	6.1	124	0.20	228	23
Rockfish, Starry	11	19.08	46	2.2	46	0.41	285	53
Rockfish, Speckled	12	18.88	34	1.6	34	0.56	334	48
Rockfish, Brown	13	18.61	20	1.0	20	0.93	371	45
Rockfish, Yelloweye	14	14.76	6	0.3	6	2.46	451	186
Rockfish, Greenstriped	15	14.69	56	2.7	56	0.26	281	36
Rockfish, Olive	16	9.26	17	0.8	17	0.54	340	57
Rockfish, Vermilion	17	8.41	7	0.3	7	1.20	388	127
Rockfish, Squarespot	18	8.07	42	2.0	42	0.19	245	17
Jack Mackerel	19	6.66	12	0.6	12	0.56	356	17
Rockfish, Black	20	4.89	7	0.3	7	0.70	356	42
Sole, Rock	21	3.01	4	0.2	4	0.75	370	77
Rockfish, Flag	22	2.72	4	0.2	4	0.68	336	63
Rockfish, Rosethorn	23	2.55	11	0.5	11	0.23	241	22
Rockfish, Stripetail	24	1.61	6	0.3	6	0.27	262	49
Rockfish, Splitnose	25	1.58	4	0.2	4	0.40	324	14
Rockfish, China	26	1.55	3	0.1	3	0.52	302	35

(Table 80. - continued)

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Copper	27	1.00	2	0.1	2	0.50	301	26
Rockfish, Gopher	28	0.63	2	0.1	2	0.32	269	19
Croaker, White	29	0.57	2	0.1	2	0.29	292	8
Sanddab, Pacific	30	0.44	4	0.2	4	0.11	217	20
Rockfish, Swordspine	31	0.18	1	0.0	1	0.18	215	0
Rockfishes (unidentified)	32	0.00	2	0.1	2	0.00	309	5
Rockfish, Sharpchin	33	0.00	2	0.1	2	0.00	301	13
Total		941.73	2083	100	1625			

C. CPUE***

Catch per Angler Day = 14.27 Catch per Angler Hour = 3.70
 Kg per Angler Day = 6.45 Kg per Angler Hour = 1.67

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Figure 9. Length-Frequency Histogram for Barred Surfperch
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

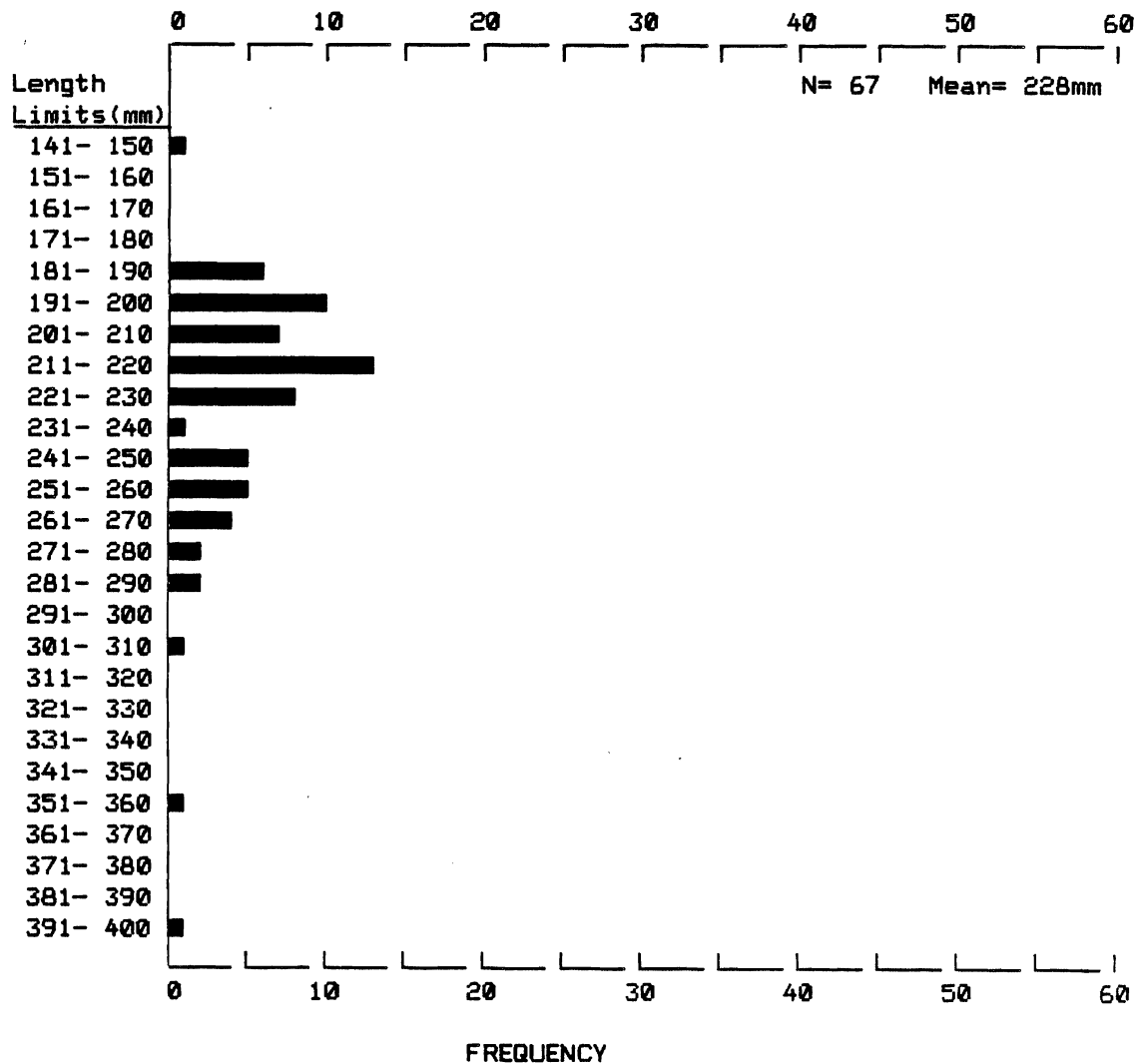


Figure 10. Length-Frequency Histogram for Blue Rockfish
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

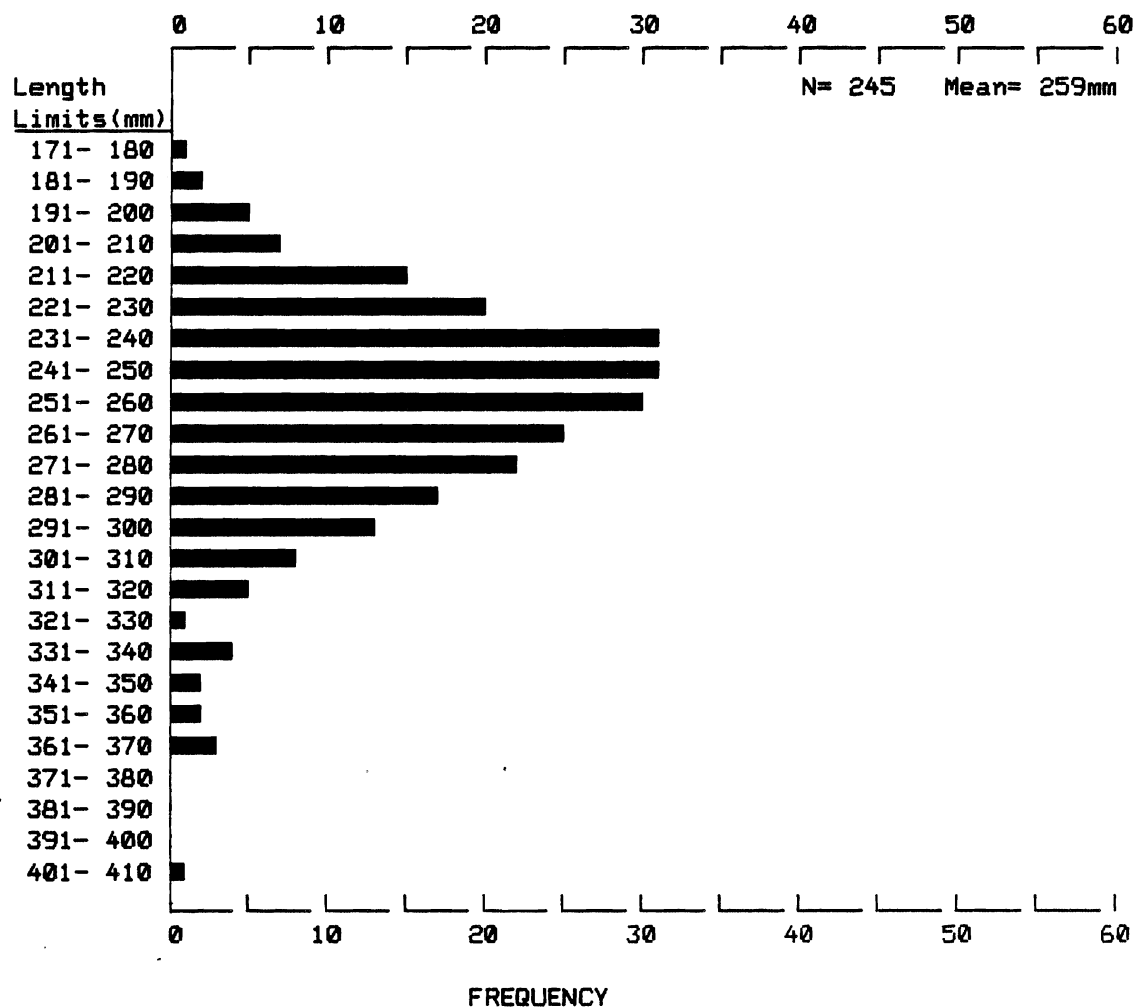


Figure 11. Length-Frequency Histogram for Bocaccio
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

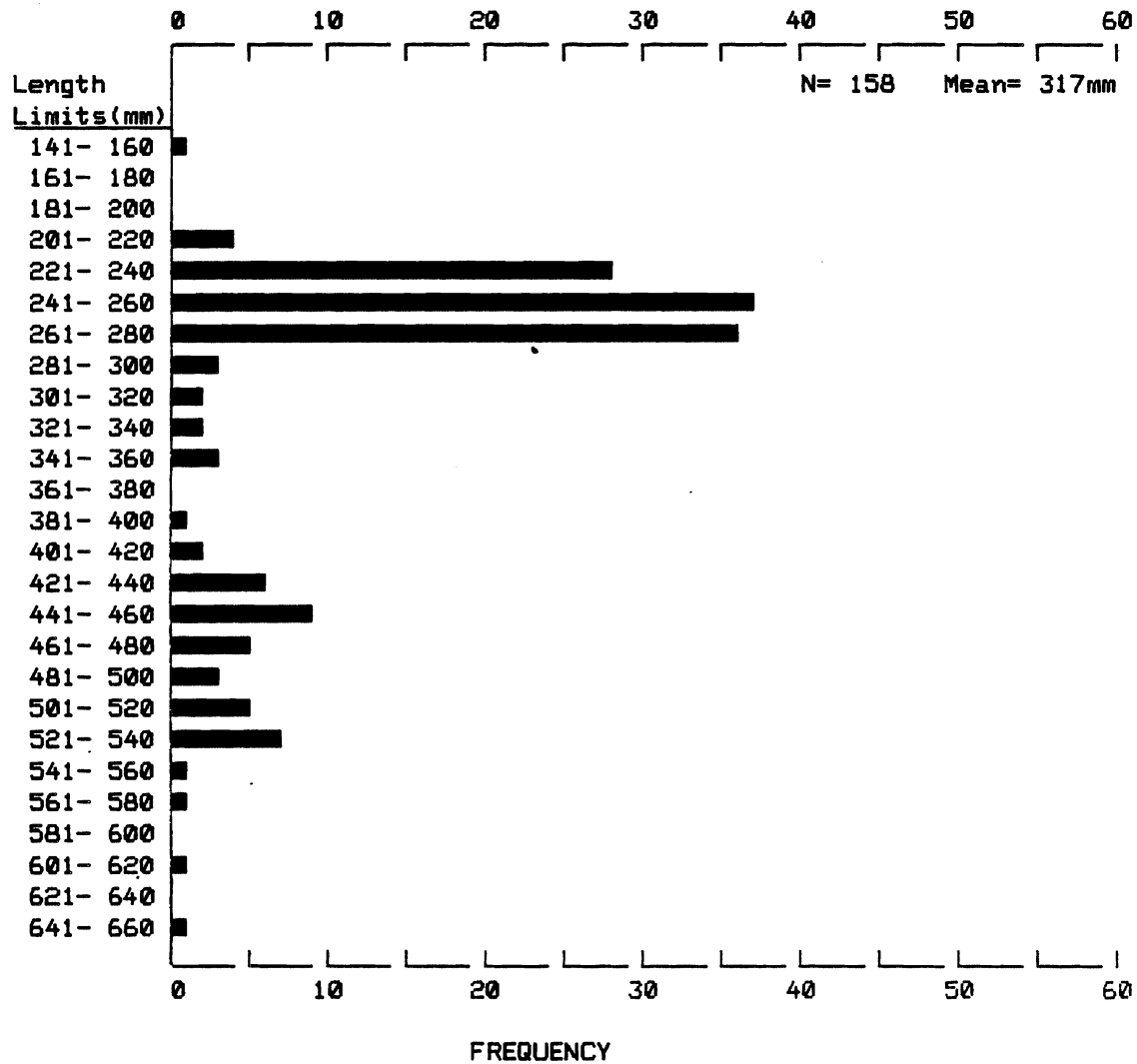


Figure 12. Length-Frequency Histogram for Chilipepper
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

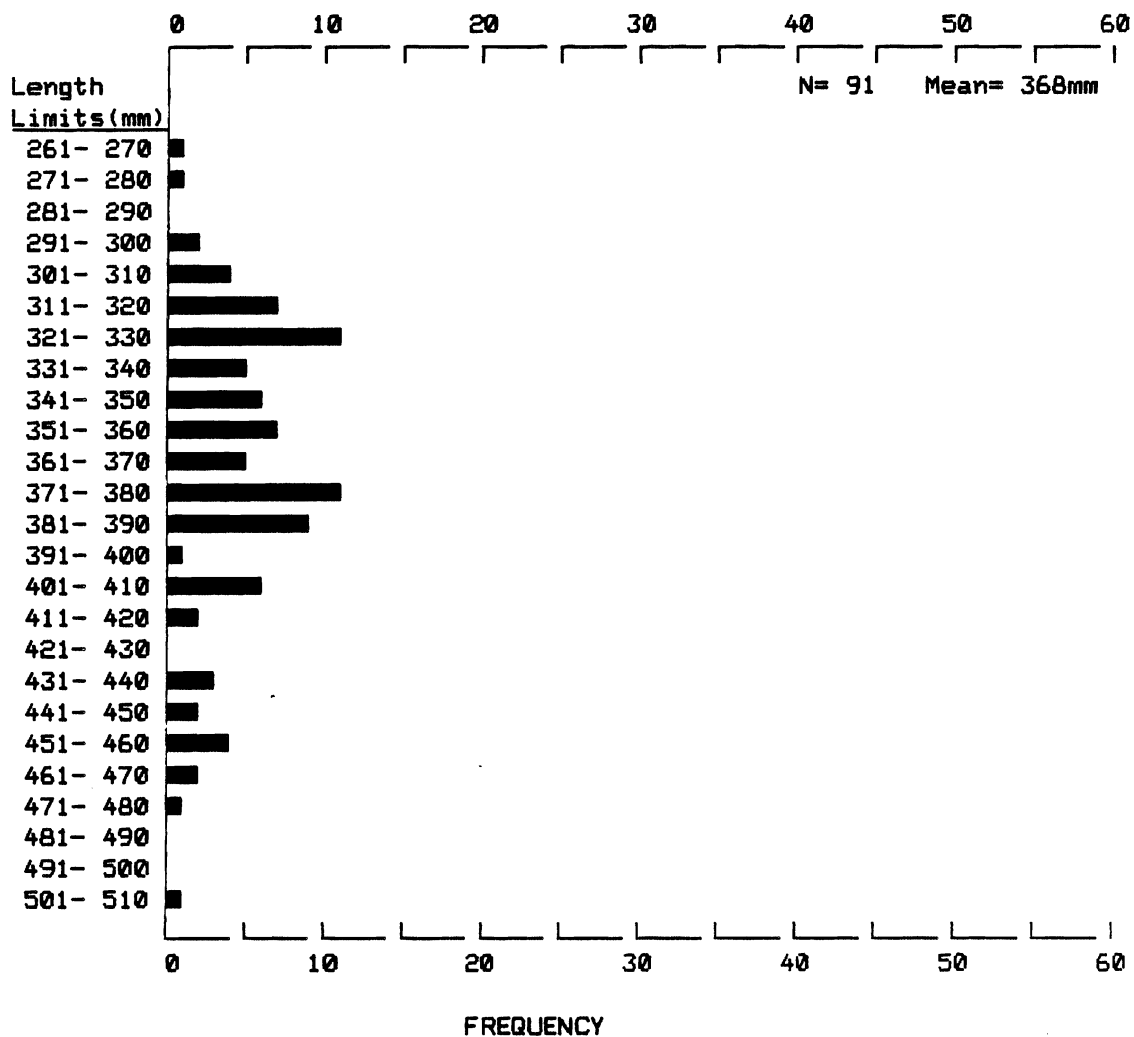


Figure 13. Length-Frequency Histogram for Greenspotted
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

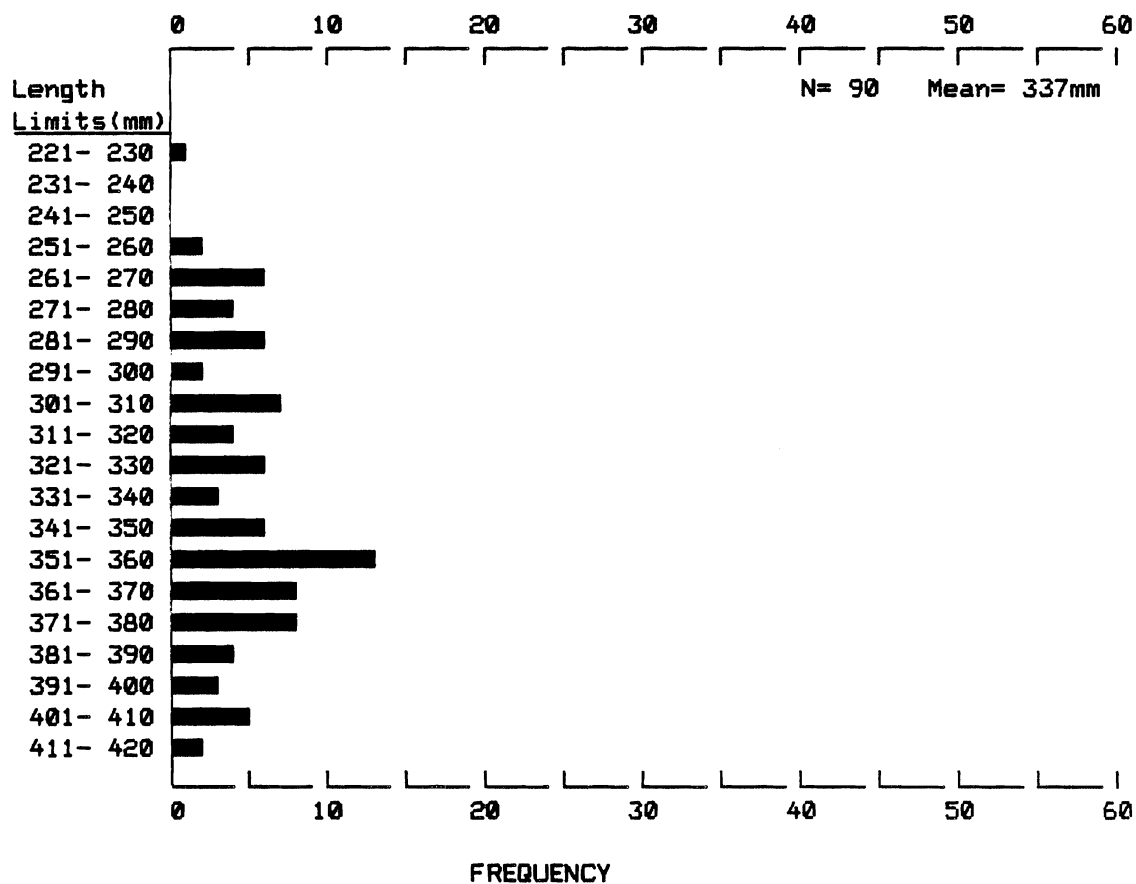


Figure 14. Length-Frequency Histogram for Rosy Rockfish
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

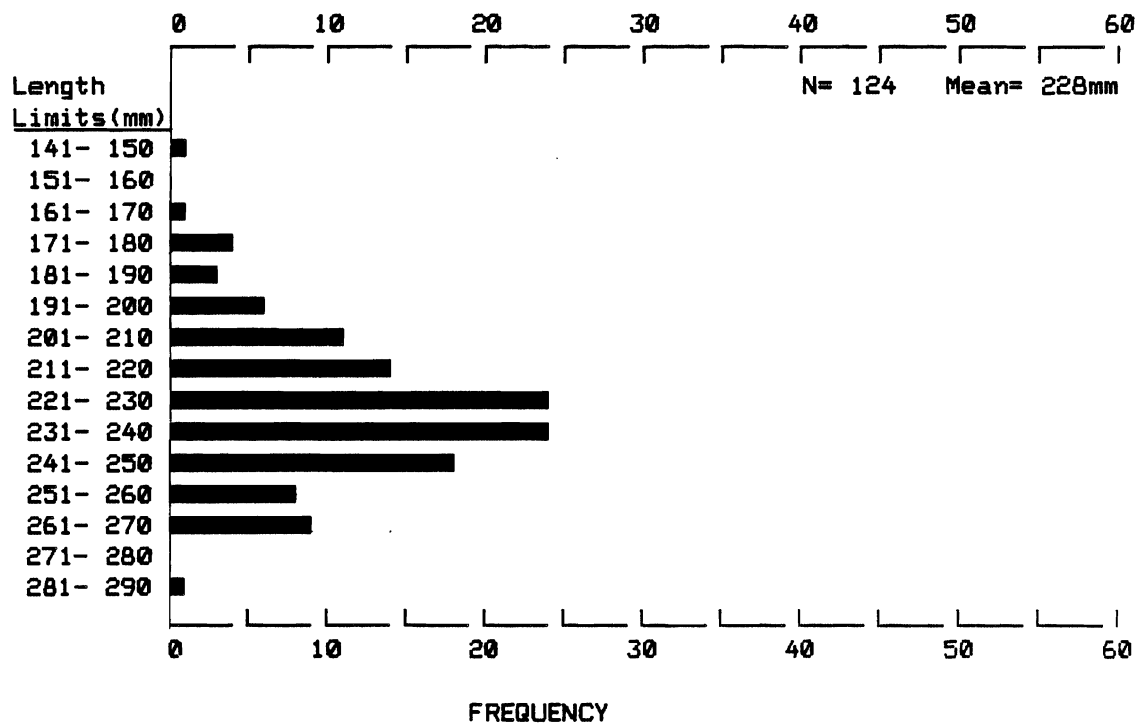


Figure 15. Length-Frequency Histogram for Widow Rockfish
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

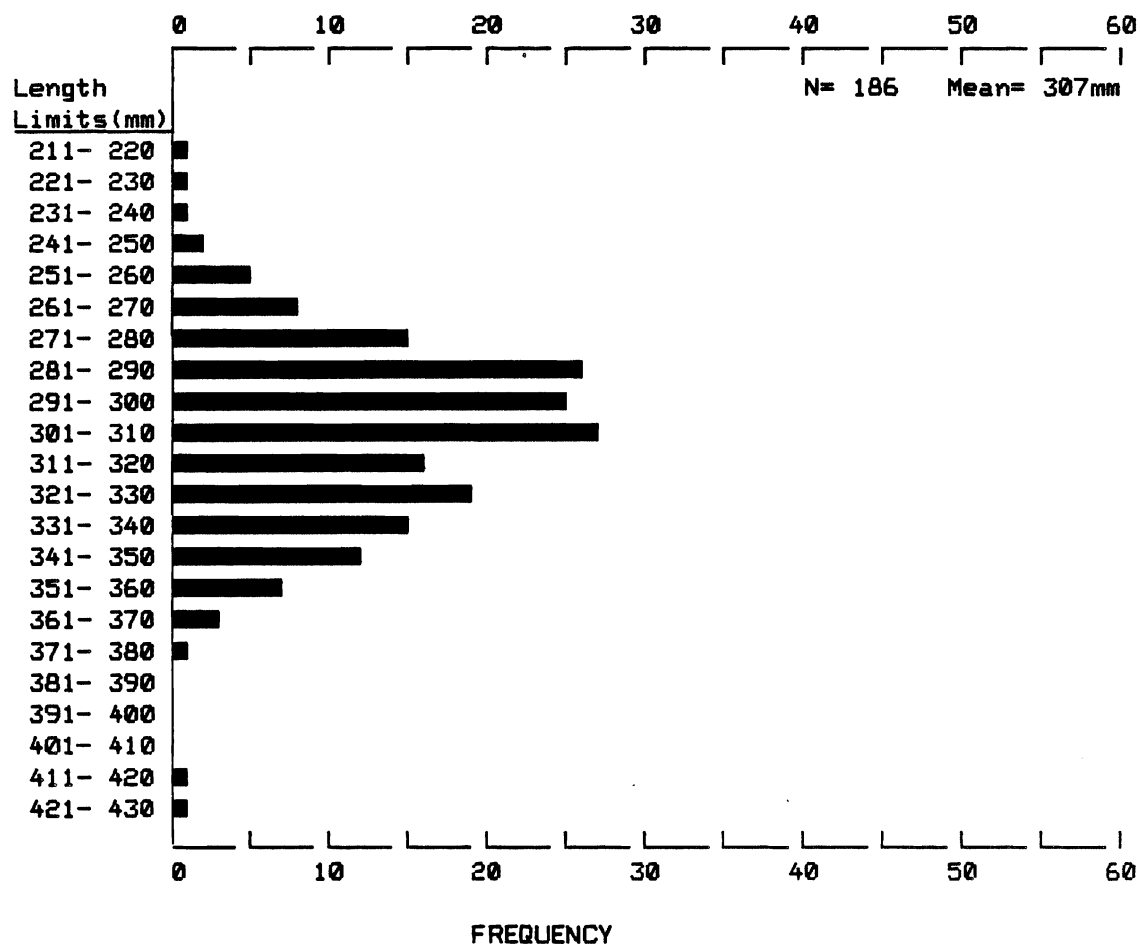


Figure 16. Length-Frequency Histogram for Yellowtail Rockfish
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

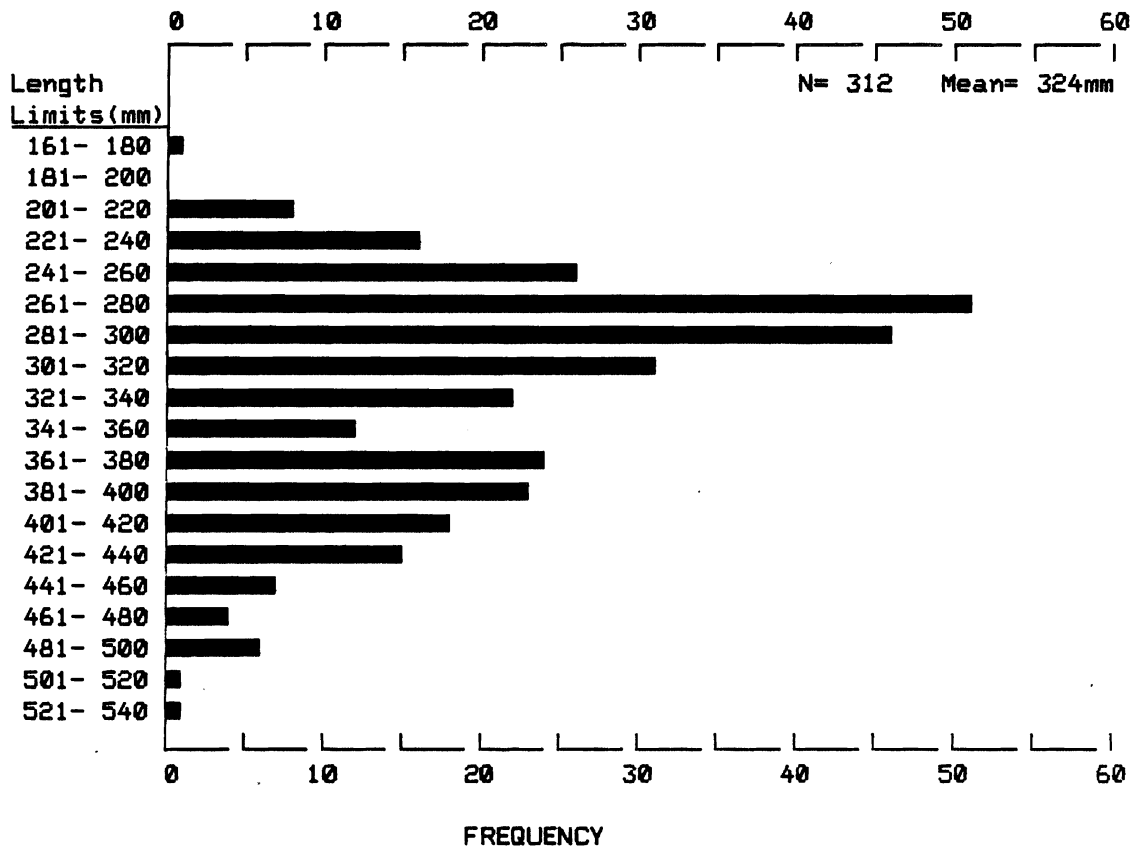


Figure 17. Length-Frequency Histogram for Pacific Mackerel
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

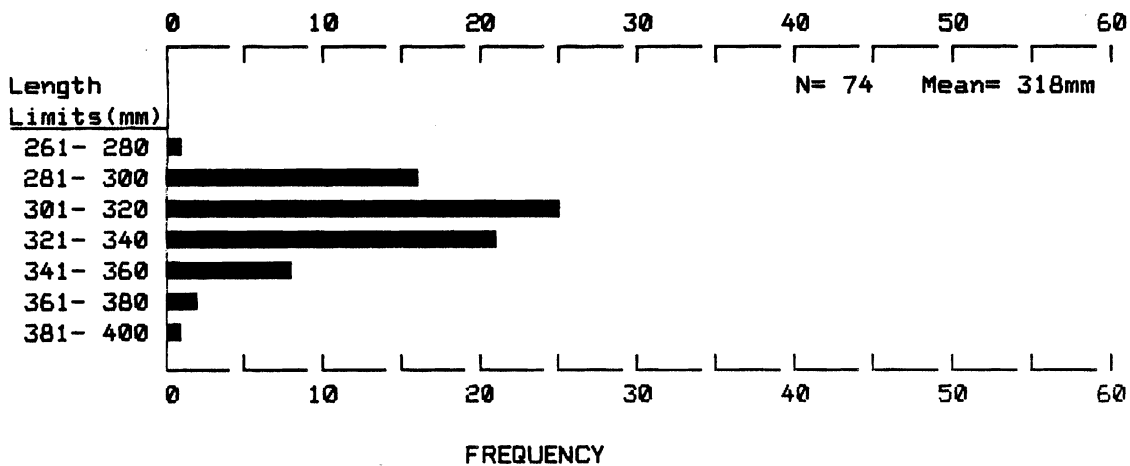


Table 81. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 81
 Total Hours Effort for Anglers Intercepted = 193.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Sculpin, Pacific Staghorn	1	94	68.1
Croaker, White	2	19	13.8
Surfperches	3	10	7.2
Jacksmelt	4	7	5.1
Flounder, Starry	5	3	2.2
Surfperch, Barred	6	2	1.4
Unidentified Fishes	7	1	0.7
Skates	8	1	0.7
Cabazon	9	1	0.7
Total		138	100

C. CPUE

Catch per Angler Day = 1.70 Catch per Angler Hour = 0.71

Table 82. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 81
 Total Hours Effort for Anglers Intercepted = 193.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Croaker, White	1	17	35.4	0.15	2.47
Sculpin, Pacific Staghorn	2	15	31.3	0.03**	0.45
Jacksmelt	3	6	12.5	0.30	1.78
Surfperches	4	3	6.3	0.00**	0.00
Flounder, Starry	5	3	6.3	0.37	1.11
Surfperch, Barred	6	2	4.2	0.17	0.34
Skates	7	1	2.1	0.00**	0.00
Cabazon	8	1	2.1	0.35	0.35
Total		48	100		6.50

C. CPUE

Catch per Angler Day = 0.59 Catch per Angler Hour = 0.25
 Kg per Angler Day = 0.08 Kg per Angler Hour = 0.03

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 83. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by Pier or Dock Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 81
 Total Hours Effort for Anglers Intercepted = 193.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Croaker, White	1	1.16	8	53.3	8	0.15	234	18
Jacksmelt	2	0.89	3	20.0	3	0.30	337	12
Flounder, Starry	3	0.37	1	6.7	1	0.37	318	0
Cabazon	4	0.35	1	6.7	1	0.35	267	0
Surfperch, Barred	5	0.34	2	13.3	2	0.17	197	69
Total		3.11	15	100	15			

C. CPUE***

Catch per Angler Day = 0.19 Catch per Angler Hour = 0.08
 Kg per Angler Day = 0.04 Kg per Angler Hour = 0.02

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 84. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 75
 Total Hours Effort for Anglers Intercepted = 158.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Surfperch, Silver	1	66	33.3
Surfperch, Barred	2	39	19.7
Opaleye	3	26	13.1
Surfperch, Walleye	4	13	6.6
Surfperch, Calico	5	11	5.6
Unidentified Fishes	6	9	4.5
Rockfish, Grass	7	8	4.0
Seaperch, Striped	8	6	3.0
Perch, Black	9	6	3.0
Sand bass, Barred	10	5	2.5
Cabazon	11	4	2.0
Rockfishes (general)	12	3	1.5
Shark, Leopard	13	1	0.5
Skates	14	1	0.5
Total		198	100

C. CPUE

Catch per Angler Day = 2.64 Catch per Angler Hour = 1.25

Table 85. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 75
 Total Hours Effort for Anglers Intercepted = 158.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Surfperch, Silver	1	42	27.8	0.13	5.25
Surfperch, Barred	2	33	21.9	0.29	9.70
Opaleye	3	24	15.9	0.21	4.94
Surfperch, Walleye	4	13	8.6	0.19	2.49
Surfperch, Calico	5	9	6.0	0.18	1.63
Rockfish, Grass	6	8	5.3	0.64	5.09
Seaperch, Striped	7	6	4.0	0.47	2.81
Perch, Black	8	6	4.0	0.23	1.40
Cabezon	9	4	2.6	0.00**	0.00
Sand bass, Barred	10	4	2.6	0.11	0.43
Unidentified Fishes	11	2	1.3	0.00**	0.00
Total		151	100		33.74

C. CPUE

Catch per Angler Day = 2.01 Catch per Angler Hour = 0.95
 Kg per Angler Day = 0.45 Kg per Angler Hour = 0.21

* Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 86. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by Beach or Bank Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 75
 Total Hours Effort for Anglers Intercepted = 158.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Surfperch, Barred	1	7.64	26	20.8	26	0.29	242	44
Opaleye	2	4.53	22	17.6	21	0.21	216	35
Surfperch, Silver	3	4.50	36	28.8	24	0.13	199	12
Rockfish, Grass	4	3.18	5	4.0	5	0.64	294	65
Seaperch, Striped	5	2.81	6	4.8	6	0.47	303	39
Surfperch, Walleye	6	2.49	13	10.4	11	0.19	222	16
Surfperch, Calico	7	1.45	8	6.4	8	0.18	224	20
Perch, Black	8	1.17	5	4.0	5	0.23	224	57
Sand bass, Barred	9	0.43	4	3.2	4	0.11	198	39
Total		28.20	125	100	110			

C. CPUE***

Catch per Angler Day = 1.67 Catch per Angler Hour = 0.79
 Kg per Angler Day = 0.38 Kg per Angler Hour = 0.18

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 87. Sampled Effort, Ranked Catch and CPUE for Area 5
in 1985 for Quarter 1, by Private or Rental Boat Anglers Using
Hook-and-Line Gear. Catch Represents All Fish Captured,
Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted	=	111
Total Hours Effort for Anglers Intercepted	=	372.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Rockfish, Blue	1	97	13.9
Croaker, White	2	82	11.7
Rockfish, Yellowtail	3	74	10.6
Rockfishes (general)	4	72	10.3
Rockfish, Gopher	5	55	7.9
Rockfish, Canary	6	44	6.3
Bocaccio	7	37	5.3
Rockfish, Olive	8	30	4.3
Rockfish, Widow	9	22	3.1
Rockfish, Greenspotted	10	20	2.9
Rockfish, Copper	11	19	2.7
Rockfish, Rosy	12	19	2.7
Rockfish, Starry	13	19	2.7
Mackerel, Pacific (Chub)	14	17	2.4
Rockfish, Brown	15	16	2.3
Rockfish, Vermilion	16	16	2.3
Lingcod	17	11	1.6
Rockfish, Black-and-yellow	18	9	1.3
Rockfish, Greenstriped	19	8	1.1
Rockfish, Yelloweye	20	7	1.0
Rockfish, Kelp	21	7	1.0
Rockfish, Black	22	6	0.9
Jacksmelt	23	2	0.3
Cabazon	24	2	0.3
Yellowtail	25	2	0.3
Rockfish, Speckled	26	1	0.1

(Table 87. - continued)

Common name	Rank by Number	Number Caught	% by Number
Greenling, Kelp	27	1	0.1
Jack Mackerel	28	1	0.1
Surfperch, Barred	29	1	0.1
Halibut, California	30	1	0.1
Sole, Petrale	31	1	0.1
Total		699	100

C. CPUE

Catch per Angler Day = 6.30 Catch per Angler Hour = 1.88

Table 88. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by Private or Rental Boat Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 111
 Total Hours Effort for Anglers Intercepted = 372.5

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Rockfish, Blue	1	96	14.8	0.36	34.16
Rockfish, Yellowtail	2	74	11.4	0.35	26.08
Croaker, White	3	72	11.1	0.21	15.02
Rockfish, Gopher	4	54	8.3	0.39	20.98
Rockfish, Canary	5	44	6.8	0.62	27.41
Rockfishes (general)	6	37	5.7	0.44**	16.28
Bocaccio	7	37	5.7	0.23	8.35
Rockfish, Olive	8	30	4.6	0.38	11.54
Rockfish, Widow	9	22	3.4	0.27	6.01
Rockfish, Greenspotted	10	20	3.1	0.57	11.37
Rockfish, Copper	11	19	2.9	0.99	18.81
Rockfish, Rosy	12	19	2.9	0.21	4.05
Rockfish, Starry	13	19	2.9	0.54	10.34
Mackerel, Pacific (Chub)	14	17	2.6	0.34	5.78
Rockfish, Brown	15	16	2.5	0.72	11.57
Rockfish, Vermilion	16	16	2.5	1.20	19.15
Rockfish, Black-and-yellow	17	9	1.4	0.38	3.42
Rockfish, Greenstriped	18	8	1.2	0.21	1.64
Rockfish, Yelloweye	19	7	1.1	1.33	9.33
Rockfish, Kelp	20	7	1.1	0.39	2.76
Lingcod	21	7	1.1	2.13	14.93
Rockfish, Black	22	6	0.9	0.33	1.99
Cabazon	23	2	0.3	1.19	2.37
Yellowtail	24	2	0.3	0.21	0.41
Jacksmelt	25	1	0.2	0.37	0.37
Rockfish, Speckled	26	1	0.2	0.68	0.68
Greenling, Kelp	27	1	0.2	0.52	0.52

(Table 88. - continued)

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Jack Mackerel	28	1	0.2	0.21	0.21
Surfperch, Barred	29	1	0.2	0.30	0.30
Halibut, California	30	1	0.2	0.80	0.80
Sole, Petrale	31	1	0.2	1.20	1.20
Total		647	100		287.85

C. CPUE

Catch per Angler Day = 5.83 Catch per Angler Hour = 1.74
 Kg per Angler Day = 2.59 Kg per Angler Hour = 0.77

*. Weight estimated from length-to-weight regression if available.

** Mean weight for this group was not calculated or was estimated from other sources (see text).

Table 89. Sampled Effort, Ranked Catch and CPUE for Area 5
in 1985 for Quarter 1, by Private or Rental Boat Anglers Using
Hook-and-Line Gear. Catch Represents Only the Fish
Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 111
Total Hours Effort for Anglers Intercepted = 372.5

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Rockfish, Blue	1	30.96	87	16.8	85	0.36	280	42
Rockfish, Yellowtail	2	23.61	67	12.9	67	0.35	286	39
Rockfish, Canary	3	19.31	31	6.0	31	0.62	342	53
Rockfish, Copper	4	17.82	18	3.5	18	0.99	362	78
Rockfish, Vermilion	5	16.76	14	2.7	14	1.20	402	95
Rockfish, Gopher	6	16.71	43	8.3	43	0.39	286	29
Rockfish, Greenspotted	7	11.37	20	3.9	20	0.57	318	62
Rockfish, Olive	8	10.00	26	5.0	26	0.38	310	27
Rockfish, Starry	9	9.80	18	3.5	18	0.54	313	52
Croaker, White	10	9.60	46	8.9	15	0.21	261	28
Rockfish, Brown	11	9.40	13	2.5	13	0.72	339	48
Rockfish, Yelloweye	12	9.33	7	1.4	7	1.33	406	72
Bocaccio	13	8.35	37	7.1	37	0.23	277	37
Lingcod	14	6.40	3	0.6	3	2.13	579	40
Rockfish, Widow	15	6.01	22	4.2	22	0.27	277	34
Rockfish, Rosy	16	3.84	18	3.5	18	0.21	234	20
Rockfish, Black-and-yellow	17	3.42	9	1.7	9	0.38	271	20
Rockfish, Kelp	18	2.76	7	1.4	7	0.39	297	18
Mackerel, Pacific (Chub)	19	2.38	7	1.4	7	0.34	297	19
Cabezon	20	2.37	2	0.4	2	1.19	417	1
Rockfish, Black	21	1.99	6	1.2	6	0.33	277	31
Rockfish, Greenstriped	22	1.64	8	1.5	8	0.21	259	36
Sole, Petrale	23	1.20	1	0.2	1	1.20	450	0
Halibut, California	24	0.80	1	0.2	1	0.80	426	0
Rockfish, Speckled	25	0.68	1	0.2	1	0.68	364	0
Greenling, Kelp	26	0.52	1	0.2	1	0.52	335	0

(Table 89. - continued)

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Yellowtail	27	0.41	2	0.4	2	0.21	240	1
Jacksnelt	28	0.37	1	0.2	1	0.37	361	0
Surfperch, Barred	29	0.30	1	0.2	1	0.30	252	0
Jack Mackerel	30	0.21	1	0.2	1	0.21	262	0
Total		228.32	518	100	485			

C. CPUE***

Catch per Angler Day = 4.67 Catch per Angler Hour = 1.39
 Kg per Angler Day = 2.06 Kg per Angler Hour = 0.61

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Table 90. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents All Fish Captured, Both Kept and Returned.

A. Sampled Effort

Number Anglers Intercepted = 40
 Total Hours Effort for Anglers Intercepted = 156.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number
Chilipepper	1	88	35.3
Rockfish, Gopher	2	41	16.5
Rockfish, Yellowtail	3	30	12.0
Rockfish, Olive	4	21	8.4
Rockfish, Blue	5	13	5.2
Rockfish, Brown	6	9	3.6
Mackerel, Pacific (Chub)	7	9	3.6
Rockfish, Rosy	8	5	2.0
Rockfish, Copper	9	4	1.6
Rockfish, Greenstriped	10	4	1.6
Rockfish, China	11	4	1.6
Rockfish, Black	12	3	1.2
Rockfish, Black-and-yellow	13	3	1.2
Sablefish	14	3	1.2
Rockfish, Canary	15	2	0.8
Rockfish, Starry	16	2	0.8
Lingcod	17	2	0.8
Unidentified Fishes	18	1	0.4
Rockfish, Quillback	19	1	0.4
Rockfish, Vermilion	20	1	0.4
Rockfish, Flag	21	1	0.4
Cabezon	22	1	0.4
Sole, Petrale	23	1	0.4
Total		249	100

C. CPUE

Catch per Angler Day = 6.23 Catch per Angler Hour = 1.60

Table 91. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Number Landed and Does Not Include Fish Returned Dead or Alive.

A. Sampled Effort

Number Anglers Intercepted = 40
 Total Hours Effort for Anglers Intercepted = 156.0

B. Ranked Catch

Common name	Rank by Number	Number Caught	% by Number	Mean Wt. (kg)*	Weight Caught
Chilipepper	1	87	35.4	0.92	80.27
Rockfish, Gopher	2	41	16.7	0.40	16.30
Rockfish, Yellowtail	3	30	12.2	0.26	7.70
Rockfish, Olive	4	21	8.5	0.44	9.18
Rockfish, Blue	5	13	5.3	0.25	3.24
Rockfish, Brown	6	9	3.7	0.71	6.36
Mackerel, Pacific (Chub)	7	9	3.7	0.43	3.89
Rockfish, Rosy	8	5	2.0	0.21	1.03
Rockfish, Copper	9	4	1.6	0.74	2.95
Rockfish, Greenstriped	10	4	1.6	0.23	0.92
Rockfish, China	11	4	1.6	0.48	1.91
Rockfish, Black	12	3	1.2	0.48	1.45
Rockfish, Black-and-yellow	13	3	1.2	0.47	1.41
Sablefish	14	3	1.2	0.45	1.35
Rockfish, Canary	15	2	0.8	0.21	0.41
Rockfish, Starry	16	2	0.8	0.40	0.79
Rockfish, Quillback	17	1	0.4	0.27	0.27
Rockfish, Vermilion	18	1	0.4	1.75	1.75
Rockfish, Flag	19	1	0.4	0.61	0.61
Lingcod	20	1	0.4	4.21	4.21
Cabazon	21	1	0.4	1.19	1.19
Sole, Petrale	22	1	0.4	0.35	0.35
Total		246	100		147.54

C. CPUE

Catch per Angler Day = 6.15 Catch per Angler Hour = 1.58
 Kg per Angler Day = 3.69 Kg per Angler Hour = 0.95

* Weight estimated from length-to-weight regression if available.

Table 92. Sampled Effort, Ranked Catch and CPUE for Area 5 in 1985 for Quarter 1, by All CPFV Anglers Using Hook-and-Line Gear. Catch Represents Only the Fish Examined by the Sampler.

A. Sampled Effort

Number Anglers Intercepted = 40
 Total Hours Effort for Anglers Intercepted = 156.0

B. Ranked Catch

Common name	Rank by Wt.	Weight* Caught	Number Caught	% by No.	No. Meas.	---Mean---		SD LN.
						Wt.* (kg)	Ln.** (mm)	
Chilipepper	1	80.27	87	35.7	85	0.92	411	63
Rockfish, Gopher	2	16.30	41	16.8	41	0.40	288	31
Rockfish, Olive	3	9.18	21	8.6	21	0.44	321	40
Rockfish, Yellowtail	4	7.70	30	12.3	30	0.26	261	24
Rockfish, Brown	5	6.36	9	3.7	9	0.71	333	59
Lingcod	6	4.21	1	0.4	1	4.21	730	0
Mackerel, Pacific (Chub)	7	3.46	8	3.3	8	0.43	319	17
Rockfish, Blue	8	3.24	13	5.3	13	0.25	253	18
Rockfish, Copper	9	2.95	4	1.6	4	0.74	335	60
Rockfish, China	10	1.91	4	1.6	4	0.48	293	46
Rockfish, Vermilion	11	1.75	1	0.4	1	1.75	478	0
Rockfish, Black	12	1.45	3	1.2	3	0.48	315	31
Rockfish, Black-and-yellow	13	1.41	3	1.2	3	0.47	286	43
Sablefish	14	1.35	3	1.2	3	0.45	371	19
Cabezon	15	1.19	1	0.4	1	1.19	418	0
Rockfish, Rosy	16	1.03	5	2.0	5	0.21	227	41
Rockfish, Starry	17	0.79	2	0.8	2	0.40	291	21
Rockfish, Greenstriped	18	0.69	3	1.2	3	0.23	273	11
Rockfish, Flag	19	0.61	1	0.4	1	0.61	330	0
Rockfish, Canary	20	0.41	2	0.8	2	0.21	237	49
Sole, Petrale	21	0.35	1	0.4	1	0.35	306	0
Rockfish, Quillback	22	0.27	1	0.4	1	0.27	235	0
Total		146.88	244	100	242			

C. CPUE***

Catch per Angler Day = 6.10 Catch per Angler Hour = 1.56
 Kg per Angler Day = 3.67 Kg per Angler Hour = 0.94

* Weight estimated from length-to-weight regression if available.

** Total length except for species with tuna-like caudal fins (see text).

*** CPUE is underestimated if all fish taken were not examined (see text).

Figure 18. Length-Frequency Histogram for Blue Rockfish
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

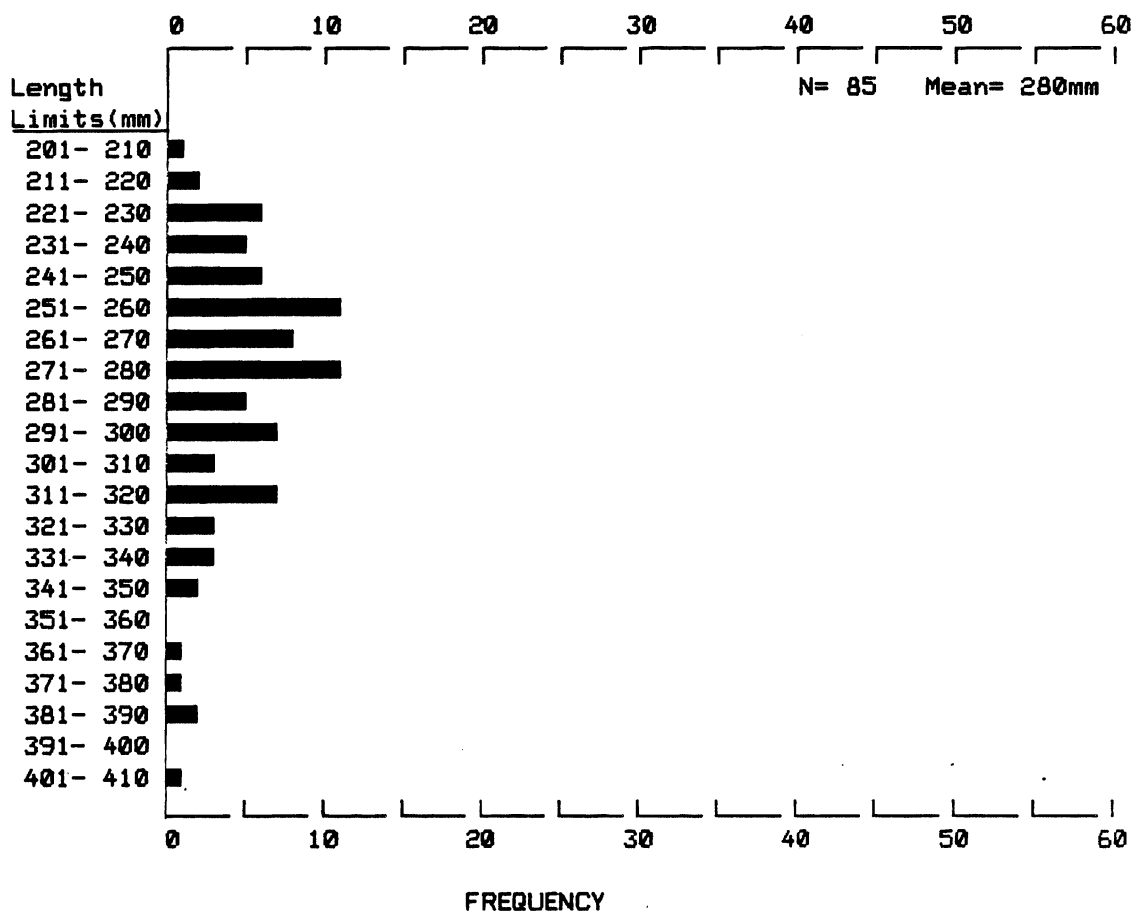


Figure 19. Length-Frequency Histogram for Bocaccio
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

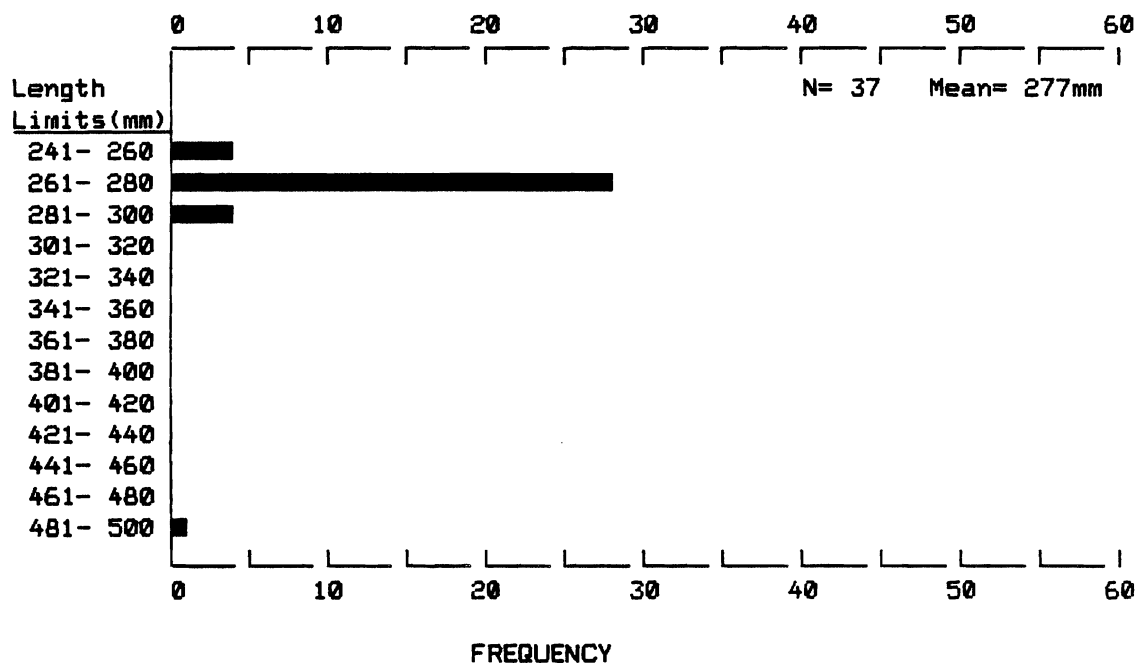


Figure 20. Length-Frequency Histogram for Yellowtail Rockfish
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

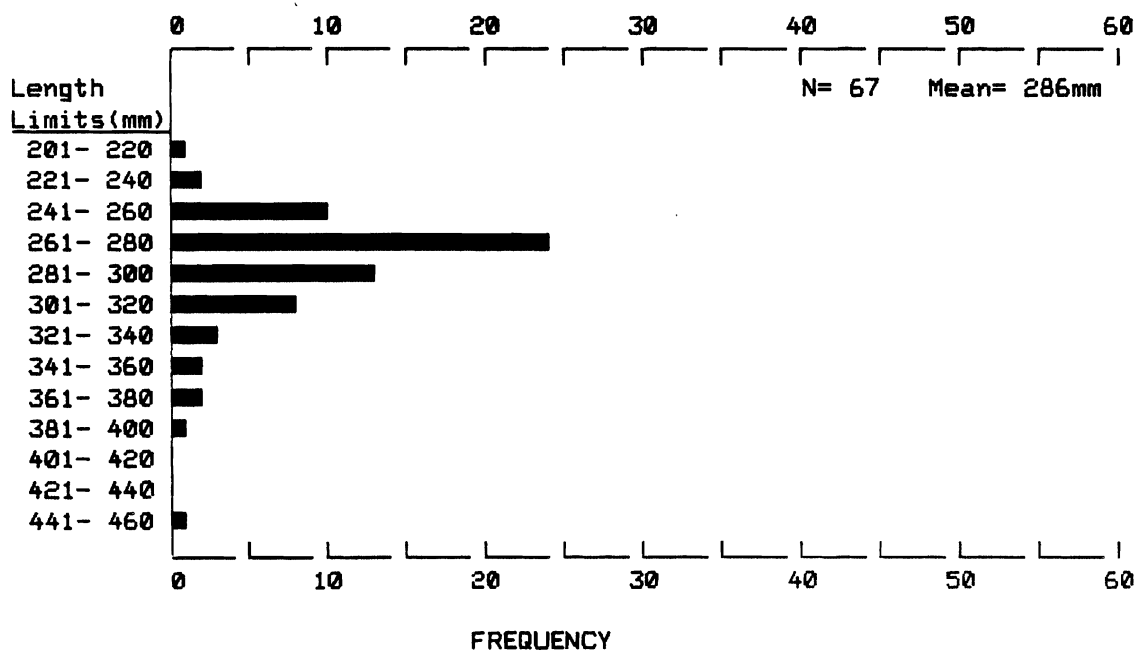
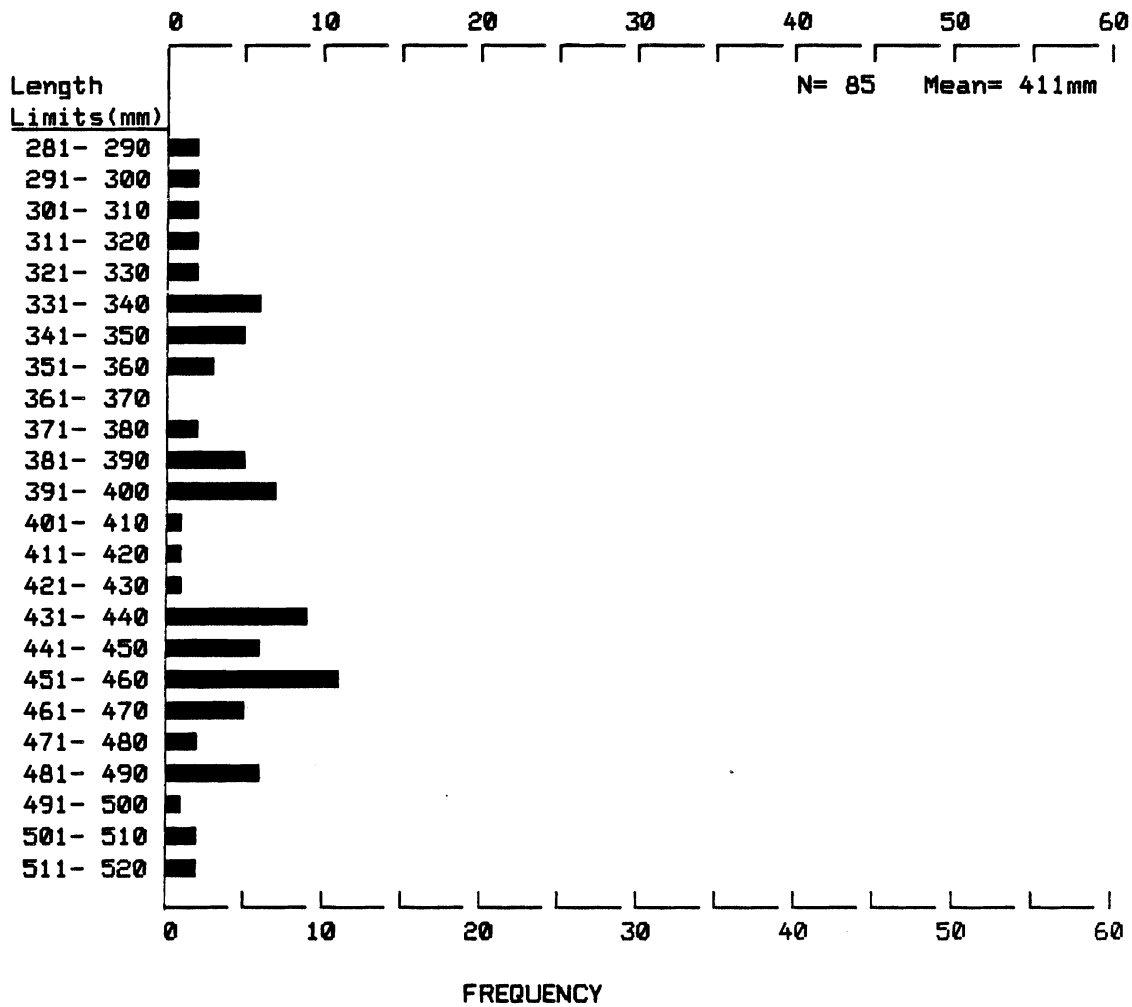


Figure 21. Length-Frequency Histogram for Chilipepper
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.



LITERATURE CITED

- Bailey, R.M., C.E. Bond, J.R. Brooker, E.A. Lachner, R.N. Lea, C.R. Robins, and W.B. Scott. 1980. A list of common and scientific names of fishes from the United States and Canada. 4th ed. Am. Fish Soc., Spec. Publ., (12):1-174.
- U.S. Department of Commerce. 1984a. Marine recreational fisheries statistics survey, Pacific coast, 1979-1980. Prepared by M.C. Holliday, D.G. Deuel and W.M. Scogin. NOAA Current Fisheries Statistics. May 1984. No. 8321.
- U.S. Department of Commerce. 1984b. Marine recreational fisheries statistics survey, Pacific coast 1981-1982. Prepared by M.C. Holliday, D.G. Deuel and W.M. Scogin. NOAA Current Fisheries Statistics. November 1984. No. 8323.
- U.S. Department of Commerce. 1985. Marine recreational fisheries statistics survey, Pacific coast 1983-1984. Prepared by M.C. Holliday, D.G. Deuel and W.M. Scogin. NOAA Current Fisheries Statistics. August 1985. No. 8325.
- Karpov, K.A. 1984. Microcomputer program series for MRFSS regional data analysis. Reference Manual. Ver 1.1 and 1.11 for 1979-1980 (Available from author). 135 pp.
- Miller, D.J. and R.N. Lea. 1972. Guide to coastal marine fishes of California. Calif. Dept. Fish and Game, Fish Bull. 157:235 pp.
- Sokal, R.R. and F.J. Rohlf. 1969. Biometry. Freeman and Co., San Francisco and London. 776 pp.

Table 93. Length-Frequency Data and Statistics for Pile Perch.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	9	363	23.9	3266	1189782	327- 403

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
326- 330	1	11.1	331- 335	0	0.0	336- 340	0	0.0
341- 345	2	22.2	346- 350	0	0.0	351- 355	1	11.1
356- 360	0	0.0	361- 365	2	22.2	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	1	11.1
386- 390	1	11.1	391- 395	0	0.0	396- 400	0	0.0
401- 405	1	11.1	406- 410	0	0.0	411- 415	0	0.0
				Total		9 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 94. Length-Frequency Data and Statistics for Striped Seaperch.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	289	31.5	2022	590020	254- 340

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
251- 255	1	14.3	256- 260	1	14.3	261- 265	0	0.0
266- 270	0	0.0	271- 275	1	14.3	276- 280	1	14.3
281- 285	0	0.0	286- 290	0	0.0	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	1	14.3
311- 315	1	14.3	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	1	14.3
				Total		7 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 95. Length-Frequency Data and Statistics for White Seaperch.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	51	290	16.2	14777	4294645	258- 327

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
256- 260	1	2.0	261- 265	2	3.9	266- 270	4	7.8
271- 275	2	3.9	276- 280	2	3.9	281- 285	12	23.5
286- 290	6	11.8	291- 295	5	9.8	296- 300	2	3.9
301- 305	5	9.8	306- 310	2	3.9	311- 315	5	9.8
316- 320	2	3.9	321- 325	0	0.0	326- 330	1	2.0
Total							51	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 96. Length-Frequency Data and Statistics for Black Rockfish.
 Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
 Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	253	90.9	1265	353083	116- 344

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
116- 120	1	20.0	121- 125	0	0.0	126- 130	0	0.0
131- 135	0	0.0	136- 140	0	0.0	141- 145	0	0.0
146- 150	0	0.0	151- 155	0	0.0	156- 160	0	0.0
161- 165	0	0.0	166- 170	0	0.0	171- 175	0	0.0
176- 180	0	0.0	181- 185	0	0.0	186- 190	0	0.0
191- 195	0	0.0	196- 200	0	0.0	201- 205	0	0.0
206- 210	0	0.0	211- 215	0	0.0	216- 220	0	0.0
221- 225	1	20.0	226- 230	0	0.0	231- 235	0	0.0
236- 240	0	0.0	241- 245	0	0.0	246- 250	0	0.0
251- 255	0	0.0	256- 260	0	0.0	261- 265	1	20.0
266- 270	0	0.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	0	0.0	286- 290	0	0.0	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	1	20.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	20.0	346- 350	0	0.0	351- 355	0	0.0
Total			5			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 97. Length-Frequency Data and Statistics for Blue Rockfish.
Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	204	31.1	1021	212361	180- 256

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
176- 180	1	20.0	181- 185	1	20.0	186- 190	1	20.0
191- 195	0	0.0	196- 200	0	0.0	201- 205	0	0.0
206- 210	1	20.0	211- 215	0	0.0	216- 220	0	0.0
221- 225	0	0.0	226- 230	0	0.0	231- 235	0	0.0
236- 240	0	0.0	241- 245	0	0.0	246- 250	0	0.0
251- 255	0	0.0	256- 260	1	20.0	261- 265	0	0.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 98. Length-Frequency Data and Statistics for Grass Rockfish.
 Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
 Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	15	269	78.0	4033	1169615	164- 420

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
161- 165	1	6.7	166- 170	1	6.7	171- 175	1	6.7
176- 180	1	6.7	181- 185	0	0.0	186- 190	0	0.0
191- 195	0	0.0	196- 200	0	0.0	201- 205	0	0.0
206- 210	1	6.7	211- 215	0	0.0	216- 220	0	0.0
221- 225	0	0.0	226- 230	0	0.0	231- 235	0	0.0
236- 240	0	0.0	241- 245	0	0.0	246- 250	0	0.0
251- 255	0	0.0	256- 260	1	6.7	261- 265	1	6.7
266- 270	0	0.0	271- 275	1	6.7	276- 280	1	6.7
281- 285	0	0.0	286- 290	0	0.0	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	1	6.7	316- 320	1	6.7	321- 325	1	6.7
326- 330	1	6.7	331- 335	0	0.0	336- 340	0	0.0
341- 345	0	0.0	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	1	6.7
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	1	6.7	421- 425	0	0.0	426- 430	0	0.0
			Total			15	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 99. Length-Frequency Data and Statistics for Kelp Greenling.
Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	39	230	57.1	8984	2193342	160- 362

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
156- 160	1	2.6	161- 165	1	2.6	166- 170	2	5.1
171- 175	3	7.7	176- 180	0	0.0	181- 185	2	5.1
186- 190	5	12.8	191- 195	0	0.0	196- 200	2	5.1
201- 205	0	0.0	206- 210	2	5.1	211- 215	1	2.6
216- 220	3	7.7	221- 225	0	0.0	226- 230	1	2.6
231- 235	1	2.6	236- 240	2	5.1	241- 245	0	0.0
246- 250	1	2.6	251- 255	1	2.6	256- 260	1	2.6
261- 265	0	0.0	266- 270	0	0.0	271- 275	1	2.6
276- 280	0	0.0	281- 285	1	2.6	286- 290	1	2.6
291- 295	1	2.6	296- 300	0	0.0	301- 305	0	0.0
306- 310	0	0.0	311- 315	1	2.6	316- 320	0	0.0
321- 325	2	5.1	326- 330	0	0.0	331- 335	1	2.6
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	1	2.6	356- 360	0	0.0	361- 365	1	2.6
Total							39	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 100. Length-Frequency Data and Statistics for Rock Greenling.
Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	14	279	47.9	3904	1118478	184- 362

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
181- 185	1	7.1	186- 190	0	0.0	191- 195	0	0.0
196- 200	0	0.0	201- 205	0	0.0	206- 210	0	0.0
211- 215	1	7.1	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	1	7.1
241- 245	0	0.0	246- 250	0	0.0	251- 255	0	0.0
256- 260	1	7.1	261- 265	0	0.0	266- 270	2	14.3
271- 275	1	7.1	276- 280	0	0.0	281- 285	2	14.3
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	2	14.3	306- 310	0	0.0	311- 315	0	0.0
316- 320	1	7.1	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	1	7.1	351- 355	0	0.0	356- 360	0	0.0
361- 365	1	7.1	366- 370	0	0.0	371- 375	0	0.0
Total						14	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 101. Length-Frequency Data and Statistics for Lingcod.
 Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
 Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	734	97.7	4406	3283208	603- 901

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
601- 605	1	16.7	606- 610	0	0.0	611- 615	0	0.0
616- 620	0	0.0	621- 625	0	0.0	626- 630	0	0.0
631- 635	0	0.0	636- 640	0	0.0	641- 645	0	0.0
646- 650	0	0.0	651- 655	0	0.0	656- 660	0	0.0
661- 665	0	0.0	666- 670	0	0.0	671- 675	0	0.0
676- 680	0	0.0	681- 685	0	0.0	686- 690	0	0.0
691- 695	0	0.0	696- 700	1	16.7	701- 705	0	0.0
706- 710	1	16.7	711- 715	0	0.0	716- 720	0	0.0
721- 725	0	0.0	726- 730	0	0.0	731- 735	0	0.0
736- 740	1	16.7	741- 745	0	0.0	746- 750	0	0.0
751- 755	0	0.0	756- 760	1	16.7	761- 765	0	0.0
766- 770	0	0.0	771- 775	0	0.0	776- 780	0	0.0
781- 785	0	0.0	786- 790	0	0.0	791- 795	0	0.0
796- 800	0	0.0	801- 805	0	0.0	806- 810	0	0.0
811- 815	0	0.0	816- 820	0	0.0	821- 825	0	0.0
826- 830	0	0.0	831- 835	0	0.0	836- 840	0	0.0
841- 845	0	0.0	846- 850	0	0.0	851- 855	0	0.0
856- 860	0	0.0	861- 865	0	0.0	866- 870	0	0.0
871- 875	0	0.0	876- 880	0	0.0	881- 885	0	0.0
886- 890	0	0.0	891- 895	0	0.0	896- 900	0	0.0
901- 905	1	16.7	906- 910	0	0.0	911- 915	0	0.0
Total						6	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 102. Length-Frequency Data and Statistics for Cabezon.
 Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
 Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	14	347	105.9	4864	1835822	118- 480

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
116- 120	1	7.1	121- 125	0	0.0	126- 130	0	0.0
131- 135	0	0.0	136- 140	0	0.0	141- 145	0	0.0
146- 150	0	0.0	151- 155	0	0.0	156- 160	0	0.0
161- 165	0	0.0	166- 170	0	0.0	171- 175	0	0.0
176- 180	0	0.0	181- 185	0	0.0	186- 190	0	0.0
191- 195	0	0.0	196- 200	1	7.1	201- 205	0	0.0
206- 210	0	0.0	211- 215	0	0.0	216- 220	0	0.0
221- 225	0	0.0	226- 230	0	0.0	231- 235	0	0.0
236- 240	0	0.0	241- 245	0	0.0	246- 250	0	0.0
251- 255	0	0.0	256- 260	0	0.0	261- 265	0	0.0
266- 270	0	0.0	271- 275	0	0.0	276- 280	1	7.1
281- 285	0	0.0	286- 290	1	7.1	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	1	7.1	316- 320	1	7.1	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	7.1	346- 350	1	7.1	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	1	7.1
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	2	14.3
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	1	7.1	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	0	0.0
476- 480	2	14.3	481- 485	0	0.0	486- 490	0	0.0
Total						14	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 103. Length-Frequency Data and Statistics for Pile Perch.
Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	362	26.6	1808	656598	333- 390

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
331- 335	1	20.0	336- 340	1	20.0	341- 345	0	0.0
346- 350	0	0.0	351- 355	0	0.0	356- 360	0	0.0
361- 365	1	20.0	366- 370	0	0.0	371- 375	0	0.0
376- 380	0	0.0	381- 385	0	0.0	386- 390	2	40.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 104. Length-Frequency Data and Statistics for Redtail Surfperch.
Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	307	33.3	1840	569806	262- 342

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
261- 265	1	16.7	266- 270	0	0.0	271- 275	1	16.7
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	0	0.0	296- 300	0	0.0	301- 305	1	16.7
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	1	16.7	326- 330	0	0.0	331- 335	0	0.0
336- 340	1	16.7	341- 345	1	16.7	346- 350	0	0.0
Total							6	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 105. Length-Frequency Data and Statistics for Silver Surfperch.
Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	226	18.2	1129	256251	196- 241

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	1	20.0	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	0	0.0	221- 225	1	20.0
226- 230	1	20.0	231- 235	0	0.0	236- 240	1	20.0
241- 245	1	20.0	246- 250	0	0.0	251- 255	0	0.0
Total						5	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 106. Length-Frequency Data and Statistics for Striped Seaperch.
Taken by Jetty or Breakwater Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	15	279	41.7	4185	1191975	227- 358

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
226- 230	2	13.3	231- 235	0	0.0	236- 240	2	13.3
241- 245	1	6.7	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	1	6.7	266- 270	0	0.0
271- 275	3	20.0	276- 280	0	0.0	281- 285	0	0.0
286- 290	0	0.0	291- 295	1	6.7	296- 300	0	0.0
301- 305	0	0.0	306- 310	1	6.7	311- 315	0	0.0
316- 320	1	6.7	321- 325	1	6.7	326- 330	0	0.0
331- 335	0	0.0	336- 340	1	6.7	341- 345	0	0.0
346- 350	0	0.0	351- 355	0	0.0	356- 360	1	6.7
Total						15	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 107. Length-Frequency Data and Statistics for Kelp Greenling.
Taken by Beach and Bank Anglers Using Hook-and-line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	277	44.8	1661	469835	234- 354

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
231- 235	1	16.7	236- 240	0	0.0	241- 245	0	0.0
246- 250	1	16.7	251- 255	1	16.7	256- 260	0	0.0
261- 265	0	0.0	266- 270	0	0.0	271- 275	1	16.7
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	0	0.0	296- 300	0	0.0	301- 305	1	16.7
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	1	16.7	356- 360	0	0.0	361- 365	0	0.0
Total						6	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 108. Length-Frequency Data and Statistics for Pile Perch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	10	330	29.4	3295	1093483	290- 372

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
286- 290	1	10.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	1	10.0	306- 310	0	0.0	311- 315	3	30.0
316- 320	0	0.0	321- 325	1	10.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	1	10.0	341- 345	0	0.0
346- 350	0	0.0	351- 355	0	0.0	356- 360	1	10.0
361- 365	0	0.0	366- 370	0	0.0	371- 375	2	20.0
Total						10	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 109. Length-Frequency Data and Statistics for Redtail Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	36	269	31.8	9668	2631764	222- 353

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
221- 225	2	5.6	226- 230	0	0.0	231- 235	2	5.6
236- 240	1	2.8	241- 245	5	13.9	246- 250	2	5.6
251- 255	6	16.7	256- 260	0	0.0	261- 265	1	2.8
266- 270	1	2.8	271- 275	2	5.6	276- 280	0	0.0
281- 285	5	13.9	286- 290	1	2.8	291- 295	2	5.6
296- 300	2	5.6	301- 305	1	2.8	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	1	2.8
341- 345	1	2.8	346- 350	0	0.0	351- 355	1	2.8
Total						36	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 110. Length-Frequency Data and Statistics for Silver Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	43	212	22.7	9128	1959360	171- 291

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
171- 175	2	4.7	176- 180	0	0.0	181- 185	0	0.0
186- 190	6	14.0	191- 195	2	4.7	196- 200	4	9.3
201- 205	5	11.6	206- 210	5	11.6	211- 215	2	4.7
216- 220	2	4.7	221- 225	1	2.3	226- 230	4	9.3
231- 235	3	7.0	236- 240	5	11.6	241- 245	1	2.3
246- 250	0	0.0	251- 255	0	0.0	256- 260	0	0.0
261- 265	0	0.0	266- 270	0	0.0	271- 275	0	0.0
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	1	2.3	296- 300	0	0.0	301- 305	0	0.0
Total						43	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 111. Length-Frequency Data and Statistics for Striped Seaperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	15	300	12.4	4506	1355768	281- 321

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
281- 285	3	20.0	286- 290	0	0.0	291- 295	1	6.7
296- 300	5	33.3	301- 305	1	6.7	306- 310	2	13.3
311- 315	0	0.0	316- 320	2	13.3	321- 325	1	6.7
Total							15	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 112. Length-Frequency Data and Statistics for White Seaperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	22	292	16.4	6432	1886100	256- 321

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
256- 260	1	4.5	261- 265	0	0.0	266- 270	1	4.5
271- 275	1	4.5	276- 280	3	13.6	281- 285	2	9.1
286- 290	3	13.6	291- 295	1	4.5	296- 300	1	4.5
301- 305	2	9.1	306- 310	6	27.3	311- 315	0	0.0
316- 320	0	0.0	321- 325	1	4.5	326- 330	0	0.0
Total							22	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 113. Length-Frequency Data and Statistics for Black Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	13	384	49.1	4987	1942015	311- 507

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
311- 315	1	7.7	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	1	7.7	336- 340	1	7.7
341- 345	1	7.7	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	1	7.7
371- 375	0	0.0	376- 380	1	7.7	381- 385	0	0.0
386- 390	0	0.0	391- 395	1	7.7	396- 400	2	15.4
401- 405	2	15.4	406- 410	1	7.7	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	0	0.0
476- 480	0	0.0	481- 485	0	0.0	486- 490	0	0.0
491- 495	0	0.0	496- 500	0	0.0	501- 505	0	0.0
506- 510	1	7.7	511- 515	0	0.0	516- 520	0	0.0

Total 13 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 114. Length-Frequency Data and Statistics for Blue Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	284	54.8	1703	498371	200- 347

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	1	16.7	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	1	16.7	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	0	0.0
271- 275	0	0.0	276- 280	0	0.0	281- 285	1	16.7
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	0	0.0	306- 310	1	16.7	311- 315	0	0.0
316- 320	0	0.0	321- 325	1	16.7	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	1	16.7	351- 355	0	0.0	356- 360	0	0.0
Total						6	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 115. Length-Frequency Data and Statistics for Lingcod.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 1, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	23	769	147.2	17691	14083825	600-1261

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
596- 600	1	4.3	601- 605	0	0.0	606- 610	0	0.0
611- 615	0	0.0	616- 620	0	0.0	621- 625	1	4.3
626- 630	0	0.0	631- 635	0	0.0	636- 640	0	0.0
641- 645	0	0.0	646- 650	0	0.0	651- 655	1	4.3
656- 660	1	4.3	661- 665	0	0.0	666- 670	1	4.3
671- 675	2	8.7	676- 680	0	0.0	681- 685	1	4.3
686- 690	0	0.0	691- 695	0	0.0	696- 700	1	4.3
701- 705	1	4.3	706- 710	0	0.0	711- 715	1	4.3
716- 720	0	0.0	721- 725	0	0.0	726- 730	1	4.3
731- 735	0	0.0	736- 740	0	0.0	741- 745	2	8.7
746- 750	0	0.0	751- 755	0	0.0	756- 760	0	0.0
761- 765	0	0.0	766- 770	1	4.3	771- 775	0	0.0
776- 780	1	4.3	781- 785	0	0.0	786- 790	1	4.3
791- 795	0	0.0	796- 800	0	0.0	801- 805	0	0.0
806- 810	0	0.0	811- 815	0	0.0	816- 820	0	0.0
821- 825	0	0.0	826- 830	0	0.0	831- 835	0	0.0
836- 840	0	0.0	841- 845	0	0.0	846- 850	0	0.0
851- 855	0	0.0	856- 860	1	4.3	861- 865	1	4.3
866- 870	0	0.0	871- 875	0	0.0	876- 880	0	0.0
881- 885	0	0.0	886- 890	0	0.0	891- 895	0	0.0
896- 900	0	0.0	901- 905	0	0.0	906- 910	1	4.3
911- 915	0	0.0	916- 920	1	4.3	921- 925	0	0.0
926- 930	0	0.0	931- 935	0	0.0	936- 940	0	0.0
941- 945	0	0.0	946- 950	0	0.0	951- 955	0	0.0
956- 960	0	0.0	961- 965	0	0.0	966- 970	0	0.0
971- 975	0	0.0	976- 980	0	0.0	981- 985	0	0.0
986- 990	1	4.3	991- 995	0	0.0	996- 1000	0	0.0
1001- 1005	0	0.0	1006- 1010	0	0.0	1011- 1015	0	0.0
1016- 1020	0	0.0	1021- 1025	0	0.0	1026- 1030	0	0.0
1031- 1035	0	0.0	1036- 1040	0	0.0	1041- 1045	0	0.0
1046- 1050	0	0.0	1051- 1055	0	0.0	1056- 1060	0	0.0
1061- 1065	0	0.0	1066- 1070	0	0.0	1071- 1075	0	0.0
1076- 1080	0	0.0	1081- 1085	0	0.0	1086- 1090	0	0.0
1091- 1095	0	0.0	1096- 1100	0	0.0	1101- 1105	0	0.0
1106- 1110	0	0.0	1111- 1115	0	0.0	1116- 1120	0	0.0
1121- 1125	0	0.0	1126- 1130	0	0.0	1131- 1135	0	0.0
1136- 1140	0	0.0	1141- 1145	0	0.0	1146- 1150	0	0.0
1151- 1155	0	0.0	1156- 1160	0	0.0	1161- 1165	0	0.0
1166- 1170	0	0.0	1171- 1175	0	0.0	1176- 1180	0	0.0
1181- 1185	0	0.0	1186- 1190	0	0.0	1191- 1195	0	0.0
1196- 1200	0	0.0	1201- 1205	0	0.0	1206- 1210	0	0.0
1211- 1215	0	0.0	1216- 1220	0	0.0	1221- 1225	0	0.0
1226- 1230	0	0.0	1231- 1235	0	0.0	1236- 1240	0	0.0
1241- 1245	0	0.0	1246- 1250	0	0.0	1251- 1255	0	0.0
1256- 1260	0	0.0	1261- 1265	1	4.3	1266- 1270	0	0.0
				Total		23 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 116. Length-Frequency Data and Statistics for Kelp Greenling.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 2, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	343	36.6	1714	592906	304- 396

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
301- 305	1	20.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	1	20.0	326- 330	1	20.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	0	0.0	351- 355	0	0.0	356- 360	0	0.0
361- 365	1	20.0	366- 370	0	0.0	371- 375	0	0.0
376- 380	0	0.0	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	1	20.0	401- 405	0	0.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 117. Length-Frequency Data and Statistics for Cabezon.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 2, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	403	81.0	2014	837486	321- 520

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
321- 325	1	20.0	326- 330	0	0.0	331- 335	1	20.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	0	0.0
381- 385	0	0.0	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	0	0.0	416- 420	1	20.0	421- 425	1	20.0
426- 430	0	0.0	431- 435	0	0.0	436- 440	0	0.0
441- 445	0	0.0	446- 450	0	0.0	451- 455	0	0.0
456- 460	0	0.0	461- 465	0	0.0	466- 470	0	0.0
471- 475	0	0.0	476- 480	0	0.0	481- 485	0	0.0
486- 490	0	0.0	491- 495	0	0.0	496- 500	0	0.0
501- 505	0	0.0	506- 510	0	0.0	511- 515	0	0.0
516- 520	1	20.0	521- 525	0	0.0	526- 530	0	0.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 118. Length-Frequency Data and Statistics for Calico Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 2, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	227	31.7	1136	262124	201- 268

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	2	40.0	206- 210	1	20.0	211- 215	0	0.0
216- 220	0	0.0	221- 225	0	0.0	226- 230	0	0.0
231- 235	0	0.0	236- 240	0	0.0	241- 245	0	0.0
246- 250	0	0.0	251- 255	1	20.0	256- 260	0	0.0
261- 265	0	0.0	266- 270	1	20.0	271- 275	0	0.0
Total						5	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 119. Length-Frequency Data and Statistics for Blue Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	93	326	58.2	30340	10209564	214- 468

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	1.1	216- 220	0	0.0	221- 225	1	1.1
226- 230	0	0.0	231- 235	1	1.1	236- 240	0	0.0
241- 245	2	2.2	246- 250	2	2.2	251- 255	3	3.2
256- 260	2	2.2	261- 265	2	2.2	266- 270	1	1.1
271- 275	3	3.2	276- 280	3	3.2	281- 285	1	1.1
286- 290	5	5.4	291- 295	1	1.1	296- 300	4	4.3
301- 305	5	5.4	306- 310	4	4.3	311- 315	4	4.3
316- 320	9	9.7	321- 325	2	2.2	326- 330	2	2.2
331- 335	2	2.2	336- 340	2	2.2	341- 345	3	3.2
346- 350	1	1.1	351- 355	1	1.1	356- 360	1	1.1
361- 365	1	1.1	366- 370	0	0.0	371- 375	1	1.1
376- 380	1	1.1	381- 385	4	4.3	386- 390	1	1.1
391- 395	0	0.0	396- 400	4	4.3	401- 405	1	1.1
406- 410	2	2.2	411- 415	1	1.1	416- 420	2	2.2
421- 425	2	2.2	426- 430	1	1.1	431- 435	0	0.0
436- 440	1	1.1	441- 445	0	0.0	446- 450	2	2.2
451- 455	0	0.0	456- 460	0	0.0	461- 465	0	0.0
466- 470	1	1.1	471- 475	0	0.0	476- 480	0	0.0
Total						93	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 120. Length-Frequency Data and Statistics for Black Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	353	25.0	2470	875312	303- 377

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
301- 305	1	14.3	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	1	14.3	351- 355	2	28.6	356- 360	0	0.0
361- 365	1	14.3	366- 370	0	0.0	371- 375	0	0.0
376- 380	2	28.6	381- 385	0	0.0	386- 390	0	0.0
Total							7	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 121. Length-Frequency Data and Statistics for Canary Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	10	337	100.2	3368	1224662	212- 580

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	10.0	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	0	0.0	246- 250	0	0.0	251- 255	1	10.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	0	0.0
271- 275	1	10.0	276- 280	0	0.0	281- 285	0	0.0
286- 290	1	10.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	0	0.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	1	10.0
346- 350	1	10.0	351- 355	1	10.0	356- 360	0	0.0
361- 365	2	20.0	366- 370	0	0.0	371- 375	0	0.0
376- 380	0	0.0	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	0	0.0	401- 405	0	0.0
406- 410	0	0.0	411- 415	0	0.0	416- 420	0	0.0
421- 425	0	0.0	426- 430	0	0.0	431- 435	0	0.0
436- 440	0	0.0	441- 445	0	0.0	446- 450	0	0.0
451- 455	0	0.0	456- 460	0	0.0	461- 465	0	0.0
466- 470	0	0.0	471- 475	0	0.0	476- 480	0	0.0
481- 485	0	0.0	486- 490	0	0.0	491- 495	0	0.0
496- 500	0	0.0	501- 505	0	0.0	506- 510	0	0.0
511- 515	0	0.0	516- 520	0	0.0	521- 525	0	0.0
526- 530	0	0.0	531- 535	0	0.0	536- 540	0	0.0
541- 545	0	0.0	546- 550	0	0.0	551- 555	0	0.0
556- 560	0	0.0	561- 565	0	0.0	566- 570	0	0.0
571- 575	0	0.0	576- 580	1	10.0	581- 585	0	0.0
				Total		10 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 122. Length-Frequency Data and Statistics for China Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	366	35.6	2196	810058	311- 408

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
311- 315	1	16.7	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	16.7	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	1	16.7	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	1	16.7
386- 390	0	0.0	391- 395	1	16.7	396- 400	0	0.0
401- 405	0	0.0	406- 410	1	16.7	411- 415	0	0.0
Total							6	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 123. Length-Frequency Data and Statistics for Rosy Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	281	15.5	1406	396324	264- 304

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
261- 265	1	20.0	266- 270	0	0.0	271- 275	1	20.0
276- 280	1	20.0	281- 285	0	0.0	286- 290	1	20.0
291- 295	0	0.0	296- 300	0	0.0	301- 305	1	20.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 124. Length-Frequency Data and Statistics for Vermilion Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	485	98.9	3394	1704332	330- 608

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
326- 330	1	14.3	331- 335	0	0.0	336- 340	0	0.0
341- 345	0	0.0	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	1	14.3
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	1	14.3
476- 480	1	14.3	481- 485	0	0.0	486- 490	0	0.0
491- 495	0	0.0	496- 500	0	0.0	501- 505	0	0.0
506- 510	0	0.0	511- 515	1	14.3	516- 520	0	0.0
521- 525	0	0.0	526- 530	0	0.0	531- 535	0	0.0
536- 540	0	0.0	541- 545	0	0.0	546- 550	0	0.0
551- 555	0	0.0	556- 560	0	0.0	561- 565	0	0.0
566- 570	0	0.0	571- 575	0	0.0	576- 580	0	0.0
581- 585	0	0.0	586- 590	0	0.0	591- 595	1	14.3
596- 600	0	0.0	601- 605	0	0.0	606- 610	1	14.3
Total						7	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 125. Length-Frequency Data and Statistics for Lingcod.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	31	672	102.5	20817	14294415	402- 879

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
401- 405	1	3.2	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	0	0.0
476- 480	0	0.0	481- 485	0	0.0	486- 490	0	0.0
491- 495	1	3.2	496- 500	0	0.0	501- 505	0	0.0
506- 510	0	0.0	511- 515	0	0.0	516- 520	0	0.0
521- 525	0	0.0	526- 530	0	0.0	531- 535	0	0.0
536- 540	1	3.2	541- 545	0	0.0	546- 550	1	3.2
551- 555	0	0.0	556- 560	0	0.0	561- 565	0	0.0
566- 570	0	0.0	571- 575	0	0.0	576- 580	0	0.0
581- 585	0	0.0	586- 590	0	0.0	591- 595	0	0.0
596- 600	0	0.0	601- 605	0	0.0	606- 610	1	3.2
611- 615	1	3.2	616- 620	1	3.2	621- 625	0	0.0
626- 630	1	3.2	631- 635	1	3.2	636- 640	1	3.2
641- 645	1	3.2	646- 650	1	3.2	651- 655	4	12.9
656- 660	0	0.0	661- 665	1	3.2	666- 670	2	6.5
671- 675	0	0.0	676- 680	0	0.0	681- 685	0	0.0
686- 690	2	6.5	691- 695	0	0.0	696- 700	0	0.0
701- 705	0	0.0	706- 710	2	6.5	711- 715	0	0.0
716- 720	0	0.0	721- 725	0	0.0	726- 730	0	0.0
731- 735	1	3.2	736- 740	0	0.0	741- 745	1	3.2
746- 750	1	3.2	751- 755	0	0.0	756- 760	1	3.2
761- 765	0	0.0	766- 770	0	0.0	771- 775	0	0.0
776- 780	0	0.0	781- 785	0	0.0	786- 790	0	0.0
791- 795	0	0.0	796- 800	0	0.0	801- 805	0	0.0
806- 810	0	0.0	811- 815	0	0.0	816- 820	0	0.0
821- 825	1	3.2	826- 830	0	0.0	831- 835	0	0.0
836- 840	1	3.2	841- 845	0	0.0	846- 850	0	0.0
851- 855	0	0.0	856- 860	0	0.0	861- 865	0	0.0
866- 870	0	0.0	871- 875	1	3.2	876- 880	1	3.2

Total	31	100%
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* Total length except for species with tuna-like caudal fin (see text)..

Table 126. Length-Frequency Data and Statistics for Cabezon.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	473	85.7	2836	1377232	386- 592

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
386- 390	1	16.7	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	1	16.7	411- 415	1	16.7
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	1	16.7
476- 480	0	0.0	481- 485	0	0.0	486- 490	0	0.0
491- 495	0	0.0	496- 500	0	0.0	501- 505	0	0.0
506- 510	0	0.0	511- 515	0	0.0	516- 520	0	0.0
521- 525	0	0.0	526- 530	0	0.0	531- 535	0	0.0
536- 540	0	0.0	541- 545	0	0.0	546- 550	0	0.0
551- 555	0	0.0	556- 560	1	16.7	561- 565	0	0.0
566- 570	0	0.0	571- 575	0	0.0	576- 580	0	0.0
581- 585	0	0.0	586- 590	0	0.0	591- 595	1	16.7
Total			6			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 127. Length-Frequency Data and Statistics for Blue Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	154	347	43.7	53361	18781717	246- 460

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
246- 250	1	0.6	251- 255	0	0.0	256- 260	0	0.0
261- 265	1	0.6	266- 270	2	1.3	271- 275	1	0.6
276- 280	2	1.3	281- 285	1	0.6	286- 290	5	3.2
291- 295	5	3.2	296- 300	6	3.9	301- 305	7	4.5
306- 310	5	3.2	311- 315	7	4.5	316- 320	10	6.5
321- 325	13	8.4	326- 330	4	2.6	331- 335	3	1.9
336- 340	3	1.9	341- 345	2	1.3	346- 350	4	2.6
351- 355	1	0.6	356- 360	7	4.5	361- 365	5	3.2
366- 370	6	3.9	371- 375	4	2.6	376- 380	10	6.5
381- 385	4	2.6	386- 390	5	3.2	391- 395	4	2.6
396- 400	5	3.2	401- 405	8	5.2	406- 410	4	2.6
411- 415	3	1.9	416- 420	2	1.3	421- 425	1	0.6
426- 430	0	0.0	431- 435	1	0.6	436- 440	0	0.0
441- 445	1	0.6	446- 450	0	0.0	451- 455	0	0.0
456- 460	1	0.6	461- 465	0	0.0	466- 470	0	0.0
Total			154			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 128. Length-Frequency Data and Statistics for Canary Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	301	55.6	2406	745226	220- 369

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
216- 220	1	12.5	221- 225	0	0.0	226- 230	0	0.0
231- 235	0	0.0	236- 240	0	0.0	241- 245	1	12.5
246- 250	0	0.0	251- 255	0	0.0	256- 260	0	0.0
261- 265	0	0.0	266- 270	1	12.5	271- 275	0	0.0
276- 280	0	0.0	281- 285	0	0.0	286- 290	1	12.5
291- 295	0	0.0	296- 300	0	0.0	301- 305	0	0.0
306- 310	0	0.0	311- 315	0	0.0	316- 320	1	12.5
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	1	12.5
351- 355	0	0.0	356- 360	1	12.5	361- 365	0	0.0
366- 370	1	12.5	371- 375	0	0.0	376- 380	0	0.0
Total							8	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 129. Length-Frequency Data and Statistics for Yellowtail Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 045, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	354	93.1	2126	796640	236- 473

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
236- 240	1	16.7	241- 245	0	0.0	246- 250	0	0.0
251- 255	0	0.0	256- 260	0	0.0	261- 265	1	16.7
266- 270	0	0.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	0	0.0	286- 290	0	0.0	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	1	16.7
341- 345	0	0.0	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	1	16.7
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	1	16.7	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	1	16.7
Total							6	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 130. Length-Frequency Data and Statistics for Copper Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	301	33.7	1807	549875	252- 347

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
251- 255	1	16.7	256- 260	0	0.0	261- 265	0	0.0
266- 270	0	0.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	1	16.7	286- 290	1	16.7	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	1	16.7
311- 315	0	0.0	316- 320	0	0.0	321- 325	0	0.0
326- 330	1	16.7	331- 335	0	0.0	336- 340	0	0.0
341- 345	0	0.0	346- 350	1	16.7	351- 355	0	0.0
Total							6	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 131. Length-Frequency Data and Statistics for Black Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	13	420	40.3	5456	2309340	314- 475

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
311- 315	1	7.7	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	0	0.0	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	1	7.7	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	2	15.4	411- 415	1	7.7
416- 420	0	0.0	421- 425	2	15.4	426- 430	0	0.0
431- 435	0	0.0	436- 440	2	15.4	441- 445	2	15.4
446- 450	1	7.7	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	1	7.7
Total							13	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 132. Length-Frequency Data and Statistics for Blue Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	197	340	40.7	66974	23093746	233- 512

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
231- 235	1	0.5	236- 240	0	0.0	241- 245	0	0.0
246- 250	0	0.0	251- 255	0	0.0	256- 260	0	0.0
261- 265	0	0.0	266- 270	0	0.0	271- 275	2	1.0
276- 280	3	1.5	281- 285	4	2.0	286- 290	4	2.0
291- 295	8	4.1	296- 300	12	6.1	301- 305	10	5.1
306- 310	16	8.1	311- 315	7	3.6	316- 320	8	4.1
321- 325	8	4.1	326- 330	6	3.0	331- 335	12	6.1
336- 340	8	4.1	341- 345	6	3.0	346- 350	8	4.1
351- 355	5	2.5	356- 360	7	3.6	361- 365	9	4.6
366- 370	7	3.6	371- 375	6	3.0	376- 380	6	3.0
381- 385	8	4.1	386- 390	7	3.6	391- 395	6	3.0
396- 400	3	1.5	401- 405	0	0.0	406- 410	2	1.0
411- 415	1	0.5	416- 420	0	0.0	421- 425	2	1.0
426- 430	2	1.0	431- 435	0	0.0	436- 440	0	0.0
441- 445	0	0.0	446- 450	1	0.5	451- 455	0	0.0
456- 460	0	0.0	461- 465	1	0.5	466- 470	0	0.0
471- 475	0	0.0	476- 480	0	0.0	481- 485	0	0.0
486- 490	0	0.0	491- 495	0	0.0	496- 500	0	0.0
501- 505	0	0.0	506- 510	0	0.0	511- 515	1	0.5

Total	197	100%
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* Total length except for species with tuna-like caudal fin (see text).

Table 133. Length-Frequency Data and Statistics for Brown Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	362	30.9	2899	1057197	306- 414

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
306- 310	1	12.5	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	1	12.5
351- 355	1	12.5	356- 360	2	25.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	1	12.5
381- 385	1	12.5	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	1	12.5	416- 420	0	0.0	421- 425	0	0.0
Total							8	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 134. Length-Frequency Data and Statistics for Canary Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	457	102.6	3196	1522374	308- 578

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
306- 310	1	14.3	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	1	14.3	346- 350	0	0.0
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	0	0.0
381- 385	0	0.0	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	0	0.0	416- 420	0	0.0	421- 425	0	0.0
426- 430	0	0.0	431- 435	0	0.0	436- 440	0	0.0
441- 445	1	14.3	446- 450	0	0.0	451- 455	1	14.3
456- 460	0	0.0	461- 465	0	0.0	466- 470	0	0.0
471- 475	0	0.0	476- 480	0	0.0	481- 485	0	0.0
486- 490	0	0.0	491- 495	0	0.0	496- 500	0	0.0
501- 505	0	0.0	506- 510	0	0.0	511- 515	0	0.0
516- 520	1	14.3	521- 525	0	0.0	526- 530	0	0.0
531- 535	0	0.0	536- 540	0	0.0	541- 545	0	0.0
546- 550	0	0.0	551- 555	1	14.3	556- 560	0	0.0
561- 565	0	0.0	566- 570	0	0.0	571- 575	0	0.0
576- 580	1	14.3	581- 585	0	0.0	586- 590	0	0.0
Total			7			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 135. Length-Frequency Data and Statistics for Chilipepper.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	430	29.9	3008	1297962	390- 464

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
386- 390	1	14.3	391- 395	0	0.0	396- 400	1	14.3
401- 405	0	0.0	406- 410	1	14.3	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	1	14.3
446- 450	1	14.3	451- 455	0	0.0	456- 460	1	14.3
461- 465	1	14.3	466- 470	0	0.0	471- 475	0	0.0
Total						7	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 136. Length-Frequency Data and Statistics for Speckled Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	383	47.5	2299	392199	323- 434

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
321- 325	1	16.7	326- 330	1	16.7	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	0	0.0
381- 385	1	16.7	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	1	16.7
411- 415	0	0.0	416- 420	0	0.0	421- 425	1	16.7
426- 430	0	0.0	431- 435	1	16.7	436- 440	0	0.0
Total						6	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 137. Length-Frequency Data and Statistics for Starry Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	356	24.6	1781	636813	324- 380

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
321- 325	1	20.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	1	20.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	1	20.0	371- 375	1	20.0	376- 380	1	20.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 138. Length-Frequency Data and Statistics for Yellowtail Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 097, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	129	409	42.2	52732	21783458	260- 486

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
256- 260	1	0.8	261- 265	0	0.0	266- 270	0	0.0
271- 275	0	0.0	276- 280	0	0.0	281- 285	1	0.8
286- 290	0	0.0	291- 295	2	1.6	296- 300	1	0.8
301- 305	2	1.6	306- 310	0	0.0	311- 315	1	0.8
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	1	0.8	341- 345	1	0.8
346- 350	2	1.6	351- 355	1	0.8	356- 360	2	1.6
361- 365	2	1.6	366- 370	1	0.8	371- 375	1	0.8
376- 380	2	1.6	381- 385	8	6.2	386- 390	3	2.3
391- 395	3	2.3	396- 400	6	4.7	401- 405	10	7.8
406- 410	7	5.4	411- 415	7	5.4	416- 420	11	8.5
421- 425	9	7.0	426- 430	6	4.7	431- 435	7	5.4
436- 440	5	3.9	441- 445	3	2.3	446- 450	7	5.4
451- 455	3	2.3	456- 460	5	3.9	461- 465	1	0.8
466- 470	4	3.1	471- 475	1	0.8	476- 480	0	0.0
481- 485	1	0.8	486- 490	1	0.8	491- 495	0	0.0
Total							129	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 139. Length-Frequency Data and Statistics for Blue Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	17	258	43.8	4393	1165919	201- 371

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	1	5.9	206- 210	0	0.0	211- 215	0	0.0
216- 220	1	5.9	221- 225	2	11.8	226- 230	1	5.9
231- 235	1	5.9	236- 240	1	5.9	241- 245	1	5.9
246- 250	2	11.8	251- 255	0	0.0	256- 260	2	11.8
261- 265	0	0.0	266- 270	0	0.0	271- 275	1	5.9
276- 280	0	0.0	281- 285	0	0.0	286- 290	1	5.9
291- 295	0	0.0	296- 300	0	0.0	301- 305	0	0.0
306- 310	1	5.9	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	1	5.9	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	1	5.9	376- 380	0	0.0
			Total			17	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 140. Length-Frequency Data and Statistics for Blue Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	74	284	55.0	20989	6173915	178- 415

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
176- 180	2	2.7	181- 185	0	0.0	186- 190	0	0.0
191- 195	1	1.4	196- 200	0	0.0	201- 205	2	2.7
206- 210	1	1.4	211- 215	1	1.4	216- 220	1	1.4
221- 225	0	0.0	226- 230	3	4.1	231- 235	3	4.1
236- 240	1	1.4	241- 245	2	2.7	246- 250	3	4.1
251- 255	2	2.7	256- 260	1	1.4	261- 265	6	8.1
266- 270	2	2.7	271- 275	6	8.1	276- 280	4	5.4
281- 285	5	6.8	286- 290	2	2.7	291- 295	3	4.1
296- 300	2	2.7	301- 305	0	0.0	306- 310	1	1.4
311- 315	1	1.4	316- 320	3	4.1	321- 325	0	0.0
326- 330	3	4.1	331- 335	1	1.4	336- 340	1	1.4
341- 345	0	0.0	346- 350	1	1.4	351- 355	0	0.0
356- 360	0	0.0	361- 365	2	2.7	366- 370	2	2.7
371- 375	0	0.0	376- 380	1	1.4	381- 385	1	1.4
386- 390	1	1.4	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	0	0.0	411- 415	3	4.1
Total			74			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 141. Length-Frequency Data and Statistics for Black Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	18	438	61.9	7876	3511372	330- 533

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
326- 330	1	5.6	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	5.6	346- 350	1	5.6	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	1	5.6
386- 390	0	0.0	391- 395	1	5.6	396- 400	0	0.0
401- 405	0	0.0	406- 410	0	0.0	411- 415	1	5.6
416- 420	1	5.6	421- 425	1	5.6	426- 430	0	0.0
431- 435	2	11.1	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	1	5.6
461- 465	0	0.0	466- 470	0	0.0	471- 475	0	0.0
476- 480	1	5.6	481- 485	2	11.1	486- 490	0	0.0
491- 495	1	5.6	496- 500	0	0.0	501- 505	0	0.0
506- 510	1	5.6	511- 515	0	0.0	516- 520	0	0.0
521- 525	1	5.6	526- 530	0	0.0	531- 535	1	5.6

Total 18 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 142. Length-Frequency Data and Statistics for Bocaccio.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	508	106.7	4062	2142176	369- 679

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
366- 370	1	12.5	371- 375	0	0.0	376- 380	0	0.0
381- 385	1	12.5	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	0	0.0	416- 420	0	0.0	421- 425	0	0.0
426- 430	0	0.0	431- 435	0	0.0	436- 440	0	0.0
441- 445	0	0.0	446- 450	0	0.0	451- 455	0	0.0
456- 460	0	0.0	461- 465	0	0.0	466- 470	0	0.0
471- 475	0	0.0	476- 480	1	12.5	481- 485	1	12.5
486- 490	0	0.0	491- 495	0	0.0	496- 500	0	0.0
501- 505	0	0.0	506- 510	1	12.5	511- 515	0	0.0
516- 520	0	0.0	521- 525	0	0.0	526- 530	0	0.0
531- 535	0	0.0	536- 540	0	0.0	541- 545	0	0.0
546- 550	1	12.5	551- 555	0	0.0	556- 560	0	0.0
561- 565	0	0.0	566- 570	0	0.0	571- 575	0	0.0
576- 580	0	0.0	581- 585	0	0.0	586- 590	0	0.0
591- 595	0	0.0	596- 600	0	0.0	601- 605	0	0.0
606- 610	0	0.0	611- 615	0	0.0	616- 620	1	12.5
621- 625	0	0.0	626- 630	0	0.0	631- 635	0	0.0
636- 640	0	0.0	641- 645	0	0.0	646- 650	0	0.0
651- 655	0	0.0	656- 660	0	0.0	661- 665	0	0.0
666- 670	0	0.0	671- 675	0	0.0	676- 680	1	12.5
Total						8 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 143. Length-Frequency Data and Statistics for Canary Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	14	236	16.9	3308	785334	196- 259

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	1	7.1	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	1	7.1	221- 225	1	7.1
226- 230	2	14.3	231- 235	1	7.1	236- 240	2	14.3
241- 245	1	7.1	246- 250	2	14.3	251- 255	2	14.3
256- 260	1	7.1	261- 265	0	0.0	266- 270	0	0.0
Total							14	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 144. Length-Frequency Data and Statistics for Chilipepper.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	414	35.4	2483	1033797	357- 458

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
356- 360	1	16.7	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	1	16.7	396- 400	0	0.0
401- 405	0	0.0	406- 410	1	16.7	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	2	33.3	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	1	16.7
Total							6	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 145. Length-Frequency Data and Statistics for Olive Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	20	296	40.5	5925	1786475	224- 378

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
221- 225	1	5.0	226- 230	0	0.0	231- 235	1	5.0
236- 240	0	0.0	241- 245	0	0.0	246- 250	1	5.0
251- 255	0	0.0	256- 260	0	0.0	261- 265	1	5.0
266- 270	1	5.0	271- 275	1	5.0	276- 280	2	10.0
281- 285	1	5.0	286- 290	0	0.0	291- 295	0	0.0
296- 300	4	20.0	301- 305	1	5.0	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	1	5.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	2	10.0
341- 345	0	0.0	346- 350	2	10.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	1	5.0	381- 385	0	0.0
Total							20	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 146. Length-Frequency Data and Statistics for Vermilion Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	15	270	52.2	4049	1131091	216- 390

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
216- 220	2	13.3	221- 225	1	6.7	226- 230	2	13.3
231- 235	0	0.0	236- 240	0	0.0	241- 245	1	6.7
246- 250	0	0.0	251- 255	0	0.0	256- 260	1	6.7
261- 265	1	6.7	266- 270	1	6.7	271- 275	1	6.7
276- 280	1	6.7	281- 285	1	6.7	286- 290	0	0.0
291- 295	0	0.0	296- 300	0	0.0	301- 305	1	6.7
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	1	6.7	376- 380	0	0.0
381- 385	0	0.0	386- 390	1	6.7	391- 395	0	0.0
Total							15	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 147. Length-Frequency Data and Statistics for Yellowtail Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 3 (Ocean), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	46	311	39.2	14287	4506389	240- 402

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
236- 240	1	2.2	241- 245	0	0.0	246- 250	1	2.2
251- 255	2	4.3	256- 260	2	4.3	261- 265	1	2.2
266- 270	1	2.2	271- 275	3	6.5	276- 280	3	6.5
281- 285	1	2.2	286- 290	1	2.2	291- 295	1	2.2
296- 300	0	0.0	301- 305	3	6.5	306- 310	1	2.2
311- 315	3	6.5	316- 320	4	8.7	321- 325	2	4.3
326- 330	1	2.2	331- 335	1	2.2	336- 340	4	8.7
341- 345	2	4.3	346- 350	1	2.2	351- 355	2	4.3
356- 360	0	0.0	361- 365	2	4.3	366- 370	0	0.0
371- 375	0	0.0	376- 380	1	2.2	381- 385	1	2.2
386- 390	0	0.0	391- 395	0	0.0	396- 400	0	0.0
401- 405	1	2.2	406- 410	0	0.0	411- 415	0	0.0
Total							46	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 148. Length-Frequency Data and Statistics for Silver Surfperch.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 3 (Bay), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	305	30.2	2138	658464	264- 347

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
261- 265	1	14.3	266- 270	0	0.0	271- 275	0	0.0
276- 280	0	0.0	281- 285	1	14.3	286- 290	1	14.3
291- 295	0	0.0	296- 300	0	0.0	301- 305	0	0.0
306- 310	1	14.3	311- 315	1	14.3	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	1	14.3	341- 345	0	0.0	346- 350	1	14.3
Total							7	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 149. Length-Frequency Data and Statistics for Leopard Shark.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 3 (Bay), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	16	569	103.1	9105	5340855	447- 896

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
446- 450	1	6.3	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	2	12.5
476- 480	0	0.0	481- 485	0	0.0	486- 490	0	0.0
491- 495	0	0.0	496- 500	1	6.3	501- 505	0	0.0
506- 510	0	0.0	511- 515	0	0.0	516- 520	0	0.0
521- 525	1	6.3	526- 530	1	6.3	531- 535	0	0.0
536- 540	0	0.0	541- 545	1	6.3	546- 550	0	0.0
551- 555	2	12.5	556- 560	0	0.0	561- 565	0	0.0
566- 570	1	6.3	571- 575	0	0.0	576- 580	0	0.0
581- 585	1	6.3	586- 590	0	0.0	591- 595	0	0.0
596- 600	0	0.0	601- 605	0	0.0	606- 610	1	6.3
611- 615	2	12.5	616- 620	0	0.0	621- 625	0	0.0
626- 630	0	0.0	631- 635	1	6.3	636- 640	0	0.0
641- 645	0	0.0	646- 650	0	0.0	651- 655	0	0.0
656- 660	0	0.0	661- 665	0	0.0	666- 670	0	0.0
671- 675	0	0.0	676- 680	0	0.0	681- 685	0	0.0
686- 690	0	0.0	691- 695	0	0.0	696- 700	0	0.0
701- 705	0	0.0	706- 710	0	0.0	711- 715	0	0.0
716- 720	0	0.0	721- 725	0	0.0	726- 730	0	0.0
731- 735	0	0.0	736- 740	0	0.0	741- 745	0	0.0
746- 750	0	0.0	751- 755	0	0.0	756- 760	0	0.0
761- 765	0	0.0	766- 770	0	0.0	771- 775	0	0.0
776- 780	0	0.0	781- 785	0	0.0	786- 790	0	0.0
791- 795	0	0.0	796- 800	0	0.0	801- 805	0	0.0
806- 810	0	0.0	811- 815	0	0.0	816- 820	0	0.0
821- 825	0	0.0	826- 830	0	0.0	831- 835	0	0.0
836- 840	0	0.0	841- 845	0	0.0	846- 850	0	0.0
851- 855	0	0.0	856- 860	0	0.0	861- 865	0	0.0
866- 870	0	0.0	871- 875	0	0.0	876- 880	0	0.0
881- 885	0	0.0	886- 890	0	0.0	891- 895	0	0.0
896- 900	1	6.3	901- 905	0	0.0	906- 910	0	0.0
Total			16			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 150. Length-Frequency Data and Statistics for White Sturgeon.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 3 (Bay), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	1283	117.0	10261	13256837	1048-1448

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
1046- 1050	1	12.5	1051- 1055	0	0.0	1056- 1060	0	0.0
1061- 1065	0	0.0	1066- 1070	0	0.0	1071- 1075	0	0.0
1076- 1080	0	0.0	1081- 1085	0	0.0	1086- 1090	0	0.0
1091- 1095	0	0.0	1096- 1100	0	0.0	1101- 1105	0	0.0
1106- 1110	0	0.0	1111- 1115	0	0.0	1116- 1120	0	0.0
1121- 1125	0	0.0	1126- 1130	0	0.0	1131- 1135	0	0.0
1136- 1140	0	0.0	1141- 1145	0	0.0	1146- 1150	0	0.0
1151- 1155	0	0.0	1156- 1160	0	0.0	1161- 1165	0	0.0
1166- 1170	0	0.0	1171- 1175	0	0.0	1176- 1180	0	0.0
1181- 1185	0	0.0	1186- 1190	0	0.0	1191- 1195	0	0.0
1196- 1200	0	0.0	1201- 1205	0	0.0	1206- 1210	0	0.0
1211- 1215	0	0.0	1216- 1220	0	0.0	1221- 1225	0	0.0
1226- 1230	0	0.0	1231- 1235	0	0.0	1236- 1240	1	12.5
1241- 1245	0	0.0	1246- 1250	0	0.0	1251- 1255	1	12.5
1256- 1260	0	0.0	1261- 1265	0	0.0	1266- 1270	0	0.0
1271- 1275	1	12.5	1276- 1280	0	0.0	1281- 1285	0	0.0
1286- 1290	0	0.0	1291- 1295	0	0.0	1296- 1300	1	12.5
1301- 1305	0	0.0	1306- 1310	0	0.0	1311- 1315	0	0.0
1316- 1320	0	0.0	1321- 1325	0	0.0	1326- 1330	0	0.0
1331- 1335	1	12.5	1336- 1340	0	0.0	1341- 1345	0	0.0
1346- 1350	0	0.0	1351- 1355	0	0.0	1356- 1360	0	0.0
1361- 1365	0	0.0	1366- 1370	1	12.5	1371- 1375	0	0.0
1376- 1380	0	0.0	1381- 1385	0	0.0	1386- 1390	0	0.0
1391- 1395	0	0.0	1396- 1400	0	0.0	1401- 1405	0	0.0
1406- 1410	0	0.0	1411- 1415	0	0.0	1416- 1420	0	0.0
1421- 1425	0	0.0	1426- 1430	0	0.0	1431- 1435	0	0.0
1436- 1440	0	0.0	1441- 1445	0	0.0	1446- 1450	1	12.5

Total	8	100%
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* Total length except for species with tuna-like caudal fin (see text).

Table 151. Length-Frequency Data and Statistics for Brown Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 3 (Bay), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	9	224	46.5	2016	468864	181- 330

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
181- 185	2	22.2	186- 190	1	11.1	191- 195	0	0.0
196- 200	0	0.0	201- 205	0	0.0	206- 210	1	11.1
211- 215	2	22.2	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	1	11.1	246- 250	1	11.1	251- 255	0	0.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	0	0.0
271- 275	0	0.0	276- 280	0	0.0	281- 285	0	0.0
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	0	0.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	0	0.0	326- 330	1	11.1
Total							9	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 152. Length-Frequency Data and Statistics for Pacific Staghorn Sculpin.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 3 (Bay), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	187	11.7	933	174649	172- 200

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
171- 175	1	20.0	176- 180	1	20.0	181- 185	0	0.0
186- 190	1	20.0	191- 195	1	20.0	196- 200	1	20.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 153. Length-Frequency Data and Statistics for White Croaker.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 3 (Bay), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	325	31.0	2273	743839	264- 358

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
261- 265	1	14.3	266- 270	0	0.0	271- 275	0	0.0
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	0	0.0	296- 300	0	0.0	301- 305	0	0.0
306- 310	0	0.0	311- 315	0	0.0	316- 320	2	28.6
321- 325	0	0.0	326- 330	1	14.3	331- 335	0	0.0
336- 340	1	14.3	341- 345	0	0.0	346- 350	0	0.0
351- 355	1	14.3	356- 360	1	14.3	361- 365	0	0.0
Total							7	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 154. Length-Frequency Data and Statistics for Pile Perch.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 3 (Bay), Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	12	355	43.8	4261	1534073	286- 428

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
286- 290	1	8.3	291- 295	0	0.0	296- 300	0	0.0
301- 305	1	8.3	306- 310	0	0.0	311- 315	0	0.0
316- 320	1	8.3	321- 325	1	8.3	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	2	16.7	351- 355	0	0.0	356- 360	0	0.0
361- 365	1	8.3	366- 370	1	8.3	371- 375	0	0.0
376- 380	1	8.3	381- 385	1	8.3	386- 390	0	0.0
391- 395	0	0.0	396- 400	0	0.0	401- 405	0	0.0
406- 410	0	0.0	411- 415	0	0.0	416- 420	1	8.3
421- 425	0	0.0	426- 430	1	8.3	431- 435	0	0.0
Total							12	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 155. Length-Frequency Data and Statistics for Jacksmelt.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	9	112	13.7	1008	114404	97- 145

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
96- 100	2	22.2	101- 105	0	0.0	106- 110	3	33.3
111- 115	2	22.2	116- 120	1	11.1	121- 125	0	0.0
126- 130	0	0.0	131- 135	0	0.0	136- 140	0	0.0
141- 145	1	11.1	146- 150	0	0.0	151- 155	0	0.0
Total							9	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 156. Length-Frequency Data and Statistics for Walleye Surfperch.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	12	182	13.4	2187	400559	167- 217

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
166- 170	1	8.3	171- 175	2	16.7	176- 180	3	25.0
181- 185	3	25.0	186- 190	1	8.3	191- 195	0	0.0
196- 200	1	8.3	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	1	8.3	221- 225	0	0.0
Total							12	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 157. Length-Frequency Data and Statistics for White Seaperch.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	16	236	24.0	3783	903051	191- 295

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
191- 195	1	6.3	196- 200	1	6.3	201- 205	0	0.0
206- 210	0	0.0	211- 215	0	0.0	216- 220	0	0.0
221- 225	2	12.5	226- 230	2	12.5	231- 235	0	0.0
236- 240	4	25.0	241- 245	2	12.5	246- 250	2	12.5
251- 255	0	0.0	256- 260	1	6.3	261- 265	0	0.0
266- 270	0	0.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	0	0.0	286- 290	0	0.0	291- 295	1	6.3
Total						16	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 158. Length-Frequency Data and Statistics for Barred Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	67	228	40.0	15253	3578203	143- 392

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
141- 145	1	1.5	146- 150	0	0.0	151- 155	0	0.0
156- 160	0	0.0	161- 165	0	0.0	166- 170	0	0.0
171- 175	0	0.0	176- 180	0	0.0	181- 185	2	3.0
186- 190	4	6.0	191- 195	1	1.5	196- 200	9	13.4
201- 205	2	3.0	206- 210	5	7.5	211- 215	8	11.9
216- 220	5	7.5	221- 225	6	9.0	226- 230	2	3.0
231- 235	0	0.0	236- 240	1	1.5	241- 245	1	1.5
246- 250	4	6.0	251- 255	0	0.0	256- 260	5	7.5
261- 265	2	3.0	266- 270	2	3.0	271- 275	2	3.0
276- 280	0	0.0	281- 285	1	1.5	286- 290	1	1.5
291- 295	0	0.0	296- 300	0	0.0	301- 305	0	0.0
306- 310	1	1.5	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	1	1.5	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	0	0.0
381- 385	0	0.0	386- 390	0	0.0	391- 395	1	1.5
Total			67			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 159. Length-Frequency Data and Statistics for Silver Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	9	197	11.3	1774	350694	180- 216

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
176- 180	1	11.1	181- 185	0	0.0	186- 190	2	22.2
191- 195	2	22.2	196- 200	1	11.1	201- 205	1	11.1
206- 210	1	11.1	211- 215	0	0.0	216- 220	1	11.1
Total							9	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 160. Length-Frequency Data and Statistics for Black Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	23	296	25.9	6812	2032300	250- 342

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
246- 250	1	4.3	251- 255	0	0.0	256- 260	1	4.3
261- 265	0	0.0	266- 270	1	4.3	271- 275	1	4.3
276- 280	4	17.4	281- 285	2	8.7	286- 290	0	0.0
291- 295	3	13.0	296- 300	2	8.7	301- 305	2	8.7
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	3	13.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	2	8.7	341- 345	1	4.3	346- 350	0	0.0
Total							23	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 161. Length-Frequency Data and Statistics for Black-and-yellow Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	11	269	24.2	2960	802374	240- 315

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
236- 240	1	9.1	241- 245	1	9.1	246- 250	1	9.1
251- 255	1	9.1	256- 260	0	0.0	261- 265	3	27.3
266- 270	0	0.0	271- 275	1	9.1	276- 280	0	0.0
281- 285	1	9.1	286- 290	0	0.0	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	1	9.1
311- 315	1	9.1	316- 320	0	0.0	321- 325	0	0.0
Total						11	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 162. Length-Frequency Data and Statistics for Blue Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	48	268	39.8	12858	3518704	206- 377

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
206- 210	4	8.3	211- 215	1	2.1	216- 220	0	0.0
221- 225	0	0.0	226- 230	4	8.3	231- 235	2	4.2
236- 240	2	4.2	241- 245	2	4.2	246- 250	5	10.4
251- 255	1	2.1	256- 260	1	2.1	261- 265	1	2.1
266- 270	3	6.3	271- 275	5	10.4	276- 280	1	2.1
281- 285	1	2.1	286- 290	4	8.3	291- 295	1	2.1
296- 300	1	2.1	301- 305	1	2.1	306- 310	1	2.1
311- 315	1	2.1	316- 320	0	0.0	321- 325	2	4.2
326- 330	2	4.2	331- 335	0	0.0	336- 340	0	0.0
341- 345	0	0.0	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	1	2.1
371- 375	0	0.0	376- 380	1	2.1	381- 385	0	0.0
Total						48	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 163. Length-Frequency Data and Statistics for Brown Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	64	293	55.0	18735	5675225	203- 425

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	1	1.6	206- 210	1	1.6	211- 215	1	1.6
216- 220	0	0.0	221- 225	2	3.1	226- 230	1	1.6
231- 235	3	4.7	236- 240	0	0.0	241- 245	3	4.7
246- 250	2	3.1	251- 255	2	3.1	256- 260	5	7.8
261- 265	4	6.3	266- 270	2	3.1	271- 275	4	6.3
276- 280	2	3.1	281- 285	1	1.6	286- 290	4	6.3
291- 295	3	4.7	296- 300	2	3.1	301- 305	0	0.0
306- 310	1	1.6	311- 315	1	1.6	316- 320	0	0.0
321- 325	0	0.0	326- 330	2	3.1	331- 335	4	6.3
336- 340	2	3.1	341- 345	0	0.0	346- 350	1	1.6
351- 355	1	1.6	356- 360	0	0.0	361- 365	1	1.6
366- 370	1	1.6	371- 375	0	0.0	376- 380	1	1.6
381- 385	0	0.0	386- 390	1	1.6	391- 395	0	0.0
396- 400	1	1.6	401- 405	1	1.6	406- 410	1	1.6
411- 415	1	1.6	416- 420	0	0.0	421- 425	1	1.6
Total						64	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 164. Length-Frequency Data and Statistics for Canary Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	19	260	36.6	4948	1312638	205- 350

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	1	5.3	206- 210	1	5.3	211- 215	0	0.0
216- 220	1	5.3	221- 225	0	0.0	226- 230	0	0.0
231- 235	2	10.5	236- 240	1	5.3	241- 245	2	10.5
246- 250	1	5.3	251- 255	0	0.0	256- 260	1	5.3
261- 265	1	5.3	266- 270	1	5.3	271- 275	1	5.3
276- 280	0	0.0	281- 285	0	0.0	286- 290	2	10.5
291- 295	1	5.3	296- 300	2	10.5	301- 305	0	0.0
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	1	5.3
Total						19	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 165. Length-Frequency Data and Statistics for Copper Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	11	278	51.4	3062	878814	204- 360

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	1	9.1	206- 210	0	0.0	211- 215	0	0.0
216- 220	1	9.1	221- 225	0	0.0	226- 230	0	0.0
231- 235	1	9.1	236- 240	0	0.0	241- 245	0	0.0
246- 250	0	0.0	251- 255	1	9.1	256- 260	1	9.1
261- 265	0	0.0	266- 270	0	0.0	271- 275	1	9.1
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	1	9.1	296- 300	1	9.1	301- 305	0	0.0
306- 310	0	0.0	311- 315	1	9.1	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	2	18.2	361- 365	0	0.0
Total						11	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 166. Length-Frequency Data and Statistics for Gopher Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	38	263	32.2	10002	2671020	174- 320

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
171- 175	1	2.6	176- 180	0	0.0	181- 185	0	0.0
186- 190	0	0.0	191- 195	0	0.0	196- 200	1	2.6
201- 205	0	0.0	206- 210	0	0.0	211- 215	0	0.0
216- 220	2	5.3	221- 225	1	2.6	226- 230	0	0.0
231- 235	1	2.6	236- 240	1	2.6	241- 245	4	10.5
246- 250	4	10.5	251- 255	0	0.0	256- 260	2	5.3
261- 265	2	5.3	266- 270	2	5.3	271- 275	3	7.9
276- 280	5	13.2	281- 285	0	0.0	286- 290	1	2.6
291- 295	2	5.3	296- 300	0	0.0	301- 305	1	2.6
306- 310	4	10.5	311- 315	0	0.0	316- 320	1	2.6

Total 38 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 167. Length-Frequency Data and Statistics for Kelp Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	299	16.0	2392	717004	280- 327

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
276- 280	1	12.5	281- 285	1	12.5	286- 290	0	0.0
291- 295	2	25.0	296- 300	1	12.5	301- 305	1	12.5
306- 310	0	0.0	311- 315	1	12.5	316- 320	0	0.0
321- 325	0	0.0	326- 330	1	12.5	331- 335	0	0.0

Total 8 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 168. Length-Frequency Data and Statistics for Olive Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	358	58.1	2504	915958	285- 431

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
281- 285	1	14.3	286- 290	0	0.0	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	2	28.6	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	14.3	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	1	14.3	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	1	14.3
431- 435	1	14.3	436- 440	0	0.0	441- 445	0	0.0
Total						7	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 169. Length-Frequency Data and Statistics for Vermilion Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	375	76.2	2627	1020759	295- 530

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
291- 295	1	14.3	296- 300	0	0.0	301- 305	0	0.0
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	1	14.3	331- 335	1	14.3
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	1	14.3	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	0	0.0
381- 385	0	0.0	386- 390	1	14.3	391- 395	1	14.3
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	0	0.0	416- 420	0	0.0	421- 425	0	0.0
426- 430	0	0.0	431- 435	0	0.0	436- 440	0	0.0
441- 445	0	0.0	446- 450	0	0.0	451- 455	0	0.0
456- 460	0	0.0	461- 465	0	0.0	466- 470	0	0.0
471- 475	0	0.0	476- 480	0	0.0	481- 485	0	0.0
486- 490	0	0.0	491- 495	0	0.0	496- 500	0	0.0
501- 505	0	0.0	506- 510	0	0.0	511- 515	0	0.0
516- 520	0	0.0	521- 525	0	0.0	526- 530	1	14.3
Total						7	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 170. Length-Frequency Data and Statistics for Yellowtail Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	20	252	20.8	5039	1277831	213- 290

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	5.0	216- 220	1	5.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	4	20.0	236- 240	1	5.0
241- 245	1	5.0	246- 250	1	5.0	251- 255	3	15.0
256- 260	1	5.0	261- 265	2	10.0	266- 270	1	5.0
271- 275	0	0.0	276- 280	3	15.0	281- 285	0	0.0
286- 290	1	5.0	291- 295	0	0.0	296- 300	0	0.0
Total						20	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 171. Length-Frequency Data and Statistics for White Croaker.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	12	269	18.9	3229	872781	233- 290

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
231- 235	1	8.3	236- 240	0	0.0	241- 245	1	8.3
246- 250	0	0.0	251- 255	1	8.3	256- 260	1	8.3
261- 265	1	8.3	266- 270	1	8.3	271- 275	1	8.3
276- 280	0	0.0	281- 285	1	8.3	286- 290	4	33.3
Total						12	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 172. Length-Frequency Data and Statistics for Lingcod.
 Taken by Private or Rental Boat Anglers Using Spear Gear.
 Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	630	75.9	5040	3215536	552- 775

Limits(mm)	Fq.	%Fq.	:	Limits(mm)	Fq.	%Fq.	:	Limits(mm)	Fq.	%Fq.	:
551- 555	1	12.5	:	556- 560	1	12.5	:	561- 565	1	12.5	:
566- 570	0	0.0	:	571- 575	0	0.0	:	576- 580	0	0.0	:
581- 585	0	0.0	:	586- 590	0	0.0	:	591- 595	0	0.0	:
596- 600	0	0.0	:	601- 605	0	0.0	:	606- 610	0	0.0	:
611- 615	1	12.5	:	616- 620	0	0.0	:	621- 625	0	0.0	:
626- 630	0	0.0	:	631- 635	0	0.0	:	636- 640	1	12.5	:
641- 645	0	0.0	:	646- 650	1	12.5	:	651- 655	0	0.0	:
656- 660	0	0.0	:	661- 665	0	0.0	:	666- 670	0	0.0	:
671- 675	0	0.0	:	676- 680	0	0.0	:	681- 685	0	0.0	:
686- 690	1	12.5	:	691- 695	0	0.0	:	696- 700	0	0.0	:
701- 705	0	0.0	:	706- 710	0	0.0	:	711- 715	0	0.0	:
716- 720	0	0.0	:	721- 725	0	0.0	:	726- 730	0	0.0	:
731- 735	0	0.0	:	736- 740	0	0.0	:	741- 745	0	0.0	:
746- 750	0	0.0	:	751- 755	0	0.0	:	756- 760	0	0.0	:
761- 765	0	0.0	:	766- 770	0	0.0	:	771- 775	1	12.5	:
Total										8	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 173. Length-Frequency Data and Statistics for Black Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	356	41.9	2490	896252	274- 410

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
271- 275	1	14.3	276- 280	0	0.0	281- 285	0	0.0
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	0	0.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	1	14.3	341- 345	0	0.0
346- 350	0	0.0	351- 355	0	0.0	356- 360	2	28.6
361- 365	0	0.0	366- 370	1	14.3	371- 375	0	0.0
376- 380	1	14.3	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	0	0.0	401- 405	0	0.0
406- 410	1	14.3	411- 415	0	0.0	416- 420	0	0.0
Total							7	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 174. Length-Frequency Data and Statistics for Blue Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	245	259	35.8	63432	16735862	180- 410

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
176- 180	1	0.4	181- 185	0	0.0	186- 190	2	0.8
191- 195	0	0.0	196- 200	5	2.0	201- 205	3	1.2
206- 210	4	1.6	211- 215	2	0.8	216- 220	13	5.3
221- 225	11	4.5	226- 230	9	3.7	231- 235	7	2.9
236- 240	24	9.8	241- 245	13	5.3	246- 250	18	7.3
251- 255	15	6.1	256- 260	15	6.1	261- 265	12	4.9
266- 270	13	5.3	271- 275	8	3.3	276- 280	14	5.7
281- 285	7	2.9	286- 290	10	4.1	291- 295	7	2.9
296- 300	6	2.4	301- 305	4	1.6	306- 310	4	1.6
311- 315	3	1.2	316- 320	2	0.8	321- 325	1	0.4
326- 330	0	0.0	331- 335	4	1.6	336- 340	0	0.0
341- 345	2	0.8	346- 350	0	0.0	351- 355	2	0.8
356- 360	0	0.0	361- 365	0	0.0	366- 370	3	1.2
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	1	0.4	411- 415	0	0.0
			Total			245	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 175. Length-Frequency Data and Statistics for Bocaccio.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	158	317	108.1	50065	17698823	153- 657

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
151- 155	1	0.6	156- 160	0	0.0	161- 165	0	0.0
166- 170	0	0.0	171- 175	0	0.0	176- 180	0	0.0
181- 185	0	0.0	186- 190	0	0.0	191- 195	0	0.0
196- 200	0	0.0	201- 205	0	0.0	206- 210	0	0.0
211- 215	1	0.6	216- 220	3	1.9	221- 225	7	4.4
226- 230	2	1.3	231- 235	8	5.1	236- 240	11	7.0
241- 245	12	7.6	246- 250	10	6.3	251- 255	8	5.1
256- 260	7	4.4	261- 265	13	8.2	266- 270	7	4.4
271- 275	9	5.7	276- 280	7	4.4	281- 285	0	0.0
286- 290	1	0.6	291- 295	1	0.6	296- 300	1	0.6
301- 305	0	0.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	2	1.3	321- 325	0	0.0	326- 330	0	0.0
331- 335	2	1.3	336- 340	0	0.0	341- 345	0	0.0
346- 350	1	0.6	351- 355	1	0.6	356- 360	1	0.6
361- 365	0	0.0	366- 370	0	0.0	371- 375	0	0.0
376- 380	0	0.0	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	1	0.6	401- 405	0	0.0
406- 410	0	0.0	411- 415	1	0.6	416- 420	1	0.6
421- 425	1	0.6	426- 430	2	1.3	431- 435	3	1.9
436- 440	0	0.0	441- 445	2	1.3	446- 450	1	0.6
451- 455	3	1.9	456- 460	3	1.9	461- 465	0	0.0
466- 470	1	0.6	471- 475	1	0.6	476- 480	3	1.9
481- 485	0	0.0	486- 490	2	1.3	491- 495	1	0.6
496- 500	0	0.0	501- 505	2	1.3	506- 510	2	1.3
511- 515	1	0.6	516- 520	0	0.0	521- 525	2	1.3
526- 530	2	1.3	531- 535	3	1.9	536- 540	0	0.0
541- 545	0	0.0	546- 550	1	0.6	551- 555	0	0.0
556- 560	0	0.0	561- 565	0	0.0	566- 570	0	0.0
571- 575	0	0.0	576- 580	1	0.6	581- 585	0	0.0
586- 590	0	0.0	591- 595	0	0.0	596- 600	0	0.0
601- 605	0	0.0	606- 610	0	0.0	611- 615	1	0.6
616- 620	0	0.0	621- 625	0	0.0	626- 630	0	0.0
631- 635	0	0.0	636- 640	0	0.0	641- 645	0	0.0
646- 650	0	0.0	651- 655	0	0.0	656- 660	1	0.6
Total			158	100%				

* Total length except for species with tuna-like caudal fin (see text).

Table 176. Length-Frequency Data and Statistics for Brown Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	20	371	44.9	7417	2788965	296- 442

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
296- 300	2	10.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	2	10.0
326- 330	0	0.0	331- 335	1	5.0	336- 340	2	10.0
341- 345	0	0.0	346- 350	2	10.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	1	5.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	2	10.0
386- 390	1	5.0	391- 395	0	0.0	396- 400	1	5.0
401- 405	1	5.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	4	20.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	1	5.0
				Total		20 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 177. Length-Frequency Data and Statistics for Canary Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

Length(mm)*		N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
		43	337	65.3	14490	5062118	213- 560

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	2.3	216- 220	0	0.0	221- 225	1	2.3
226- 230	0	0.0	231- 235	0	0.0	236- 240	1	2.3
241- 245	1	2.3	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	2	4.7	266- 270	2	4.7
271- 275	0	0.0	276- 280	0	0.0	281- 285	1	2.3
286- 290	1	2.3	291- 295	0	0.0	296- 300	1	2.3
301- 305	1	2.3	306- 310	1	2.3	311- 315	2	4.7
316- 320	2	4.7	321- 325	1	2.3	326- 330	2	4.7
331- 335	1	2.3	336- 340	2	4.7	341- 345	2	4.7
346- 350	2	4.7	351- 355	2	4.7	356- 360	1	2.3
361- 365	1	2.3	366- 370	0	0.0	371- 375	1	2.3
376- 380	2	4.7	381- 385	0	0.0	386- 390	1	2.3
391- 395	2	4.7	396- 400	1	2.3	401- 405	1	2.3
406- 410	0	0.0	411- 415	0	0.0	416- 420	0	0.0
421- 425	0	0.0	426- 430	2	4.7	431- 435	0	0.0
436- 440	0	0.0	441- 445	1	2.3	446- 450	0	0.0
451- 455	0	0.0	456- 460	0	0.0	461- 465	0	0.0
466- 470	0	0.0	471- 475	0	0.0	476- 480	0	0.0
481- 485	0	0.0	486- 490	0	0.0	491- 495	0	0.0
496- 500	0	0.0	501- 505	0	0.0	506- 510	0	0.0
511- 515	0	0.0	516- 520	0	0.0	521- 525	0	0.0
526- 530	0	0.0	531- 535	0	0.0	536- 540	0	0.0
541- 545	0	0.0	546- 550	0	0.0	551- 555	0	0.0
556- 560	1	2.3	561- 565	0	0.0	566- 570	0	0.0

Total	43	100%
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* Total length except for species with tuna-like caudal fin (see text).

Table 178. Length-Frequency Data and Statistics for Chilipepper.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	91	368	49.3	33471	12530093	267- 507

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
266- 270	1	1.1	271- 275	1	1.1	276- 280	0	0.0
281- 285	0	0.0	286- 290	0	0.0	291- 295	0	0.0
296- 300	2	2.2	301- 305	2	2.2	306- 310	2	2.2
311- 315	6	6.6	316- 320	1	1.1	321- 325	3	3.3
326- 330	8	8.8	331- 335	3	3.3	336- 340	2	2.2
341- 345	2	2.2	346- 350	4	4.4	351- 355	3	3.3
356- 360	4	4.4	361- 365	1	1.1	366- 370	4	4.4
371- 375	6	6.6	376- 380	5	5.5	381- 385	5	5.5
386- 390	4	4.4	391- 395	1	1.1	396- 400	0	0.0
401- 405	0	0.0	406- 410	6	6.6	411- 415	1	1.1
416- 420	1	1.1	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	3	3.3	441- 445	1	1.1
446- 450	1	1.1	451- 455	2	2.2	456- 460	2	2.2
461- 465	1	1.1	466- 470	1	1.1	471- 475	0	0.0
476- 480	1	1.1	481- 485	0	0.0	486- 490	0	0.0
491- 495	0	0.0	496- 500	0	0.0	501- 505	0	0.0
506- 510	1	1.1	511- 515	0	0.0	516- 520	0	0.0

Total 91 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 179. Length-Frequency Data and Statistics for Greenspotted Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	90	337	45.5	30359	10424653	225- 420

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
221- 225	1	1.1	226- 230	0	0.0	231- 235	0	0.0
236- 240	0	0.0	241- 245	0	0.0	246- 250	0	0.0
251- 255	0	0.0	256- 260	2	2.2	261- 265	4	4.4
266- 270	2	2.2	271- 275	1	1.1	276- 280	3	3.3
281- 285	3	3.3	286- 290	3	3.3	291- 295	2	2.2
296- 300	0	0.0	301- 305	3	3.3	306- 310	4	4.4
311- 315	2	2.2	316- 320	2	2.2	321- 325	5	5.6
326- 330	1	1.1	331- 335	1	1.1	336- 340	2	2.2
341- 345	2	2.2	346- 350	4	4.4	351- 355	8	8.9
356- 360	5	5.6	361- 365	6	6.7	366- 370	2	2.2
371- 375	1	1.1	376- 380	7	7.8	381- 385	0	0.0
386- 390	4	4.4	391- 395	1	1.1	396- 400	2	2.2
401- 405	2	2.2	406- 410	3	3.3	411- 415	1	1.1
416- 420	1	1.1	421- 425	0	0.0	426- 430	0	0.0
Total						90	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 180. Length-Frequency Data and Statistics for Greenstriped Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	56	281	35.6	15715	4479593	208- 352

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
206- 210	1	1.8	211- 215	2	3.6	216- 220	1	1.8
221- 225	0	0.0	226- 230	4	7.1	231- 235	1	1.8
236- 240	0	0.0	241- 245	1	1.8	246- 250	0	0.0
251- 255	1	1.8	256- 260	2	3.6	261- 265	3	5.4
266- 270	5	8.9	271- 275	3	5.4	276- 280	4	7.1
281- 285	2	3.6	286- 290	3	5.4	291- 295	2	3.6
296- 300	4	7.1	301- 305	2	3.6	306- 310	4	7.1
311- 315	4	7.1	316- 320	2	3.6	321- 325	0	0.0
326- 330	0	0.0	331- 335	1	1.8	336- 340	0	0.0
341- 345	2	3.6	346- 350	1	1.8	351- 355	1	1.8
Total						56	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 181. Length-Frequency Data and Statistics for Olive Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	17	340	57.0	5772	2011764	213- 435

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	5.9	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	0	0.0	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	0	0.0
271- 275	1	5.9	276- 280	0	0.0	281- 285	1	5.9
286- 290	0	0.0	291- 295	1	5.9	296- 300	1	5.9
301- 305	0	0.0	306- 310	1	5.9	311- 315	0	0.0
316- 320	0	0.0	321- 325	1	5.9	326- 330	0	0.0
331- 335	0	0.0	336- 340	1	5.9	341- 345	0	0.0
346- 350	0	0.0	351- 355	1	5.9	356- 360	2	11.8
361- 365	1	5.9	366- 370	0	0.0	371- 375	0	0.0
376- 380	1	5.9	381- 385	2	11.8	386- 390	0	0.0
391- 395	0	0.0	396- 400	0	0.0	401- 405	0	0.0
406- 410	0	0.0	411- 415	0	0.0	416- 420	0	0.0
421- 425	0	0.0	426- 430	1	5.9	431- 435	1	5.9
Total				17	100%			

* Total length except for species with tuna-like caudal fin (see text).

Table 182. Length-Frequency Data and Statistics for Rosethorn Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	11	241	22.1	2646	641346	198- 266

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	1	9.1	201- 205	1	9.1	206- 210	0	0.0
211- 215	0	0.0	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	3	27.3
241- 245	0	0.0	246- 250	3	27.3	251- 255	1	9.1
256- 260	0	0.0	261- 265	1	9.1	266- 270	1	9.1
Total				11	100%			

* Total length except for species with tuna-like caudal fin (see text).

Table 183. Length-Frequency Data and Statistics for Rosy Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	124	228	23.4	28301	6526653	150- 282

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
146- 150	1	0.8	151- 155	0	0.0	156- 160	0	0.0
161- 165	0	0.0	166- 170	1	0.8	171- 175	2	1.6
176- 180	2	1.6	181- 185	1	0.8	186- 190	2	1.6
191- 195	4	3.2	196- 200	2	1.6	201- 205	2	1.6
206- 210	9	7.3	211- 215	7	5.6	216- 220	7	5.6
221- 225	11	8.9	226- 230	13	10.5	231- 235	11	8.9
236- 240	13	10.5	241- 245	14	11.3	246- 250	4	3.2
251- 255	5	4.0	256- 260	3	2.4	261- 265	4	3.2
266- 270	5	4.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	1	0.8	286- 290	0	0.0	291- 295	0	0.0

Total 124 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 184. Length-Frequency Data and Statistics for Speckled Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	34	334	47.5	11349	3862763	255- 455

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
251- 255	1	2.9	256- 260	1	2.9	261- 265	1	2.9
266- 270	0	0.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	0	0.0	286- 290	1	2.9	291- 295	2	5.9
296- 300	1	2.9	301- 305	1	2.9	306- 310	2	5.9
311- 315	2	5.9	316- 320	2	5.9	321- 325	4	11.8
326- 330	2	5.9	331- 335	2	5.9	336- 340	2	5.9
341- 345	1	2.9	346- 350	0	0.0	351- 355	0	0.0
356- 360	1	2.9	361- 365	0	0.0	366- 370	2	5.9
371- 375	1	2.9	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	2	5.9	396- 400	0	0.0
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	2	5.9	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	1	2.9	456- 460	0	0.0

Total 34 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 185. Length-Frequency Data and Statistics for Squarespot Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	42	245	17.4	10276	2526544	195- 275

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
191- 195	1	2.4	196- 200	0	0.0	201- 205	0	0.0
206- 210	1	2.4	211- 215	2	4.8	216- 220	1	2.4
221- 225	0	0.0	226- 230	2	4.8	231- 235	2	4.8
236- 240	4	9.5	241- 245	7	16.7	246- 250	7	16.7
251- 255	4	9.5	256- 260	4	9.5	261- 265	3	7.1
266- 270	2	4.8	271- 275	2	4.8	276- 280	0	0.0
Total							42	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 186. Length-Frequency Data and Statistics for Starry Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	46	285	53.0	13120	3868420	193- 395

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
191- 195	1	2.2	196- 200	1	2.2	201- 205	3	6.5
206- 210	1	2.2	211- 215	1	2.2	216- 220	0	0.0
221- 225	1	2.2	226- 230	1	2.2	231- 235	0	0.0
236- 240	3	6.5	241- 245	0	0.0	246- 250	2	4.3
251- 255	0	0.0	256- 260	0	0.0	261- 265	1	2.2
266- 270	2	4.3	271- 275	0	0.0	276- 280	3	6.5
281- 285	3	6.5	286- 290	1	2.2	291- 295	1	2.2
296- 300	3	6.5	301- 305	3	6.5	306- 310	3	6.5
311- 315	0	0.0	316- 320	2	4.3	321- 325	0	0.0
326- 330	1	2.2	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	2.2	346- 350	2	4.3	351- 355	2	4.3
356- 360	0	0.0	361- 365	0	0.0	366- 370	2	4.3
371- 375	0	0.0	376- 380	0	0.0	381- 385	1	2.2
386- 390	0	0.0	391- 395	1	2.2	396- 400	0	0.0
Total							46	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 187. Length-Frequency Data and Statistics for Stripetail Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	262	48.6	1571	423171	168- 303

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
166- 170	1	16.7	171- 175	0	0.0	176- 180	0	0.0
181- 185	0	0.0	186- 190	0	0.0	191- 195	0	0.0
196- 200	0	0.0	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	0	0.0	246- 250	0	0.0	251- 255	0	0.0
256- 260	1	16.7	261- 265	0	0.0	266- 270	0	0.0
271- 275	2	33.3	276- 280	0	0.0	281- 285	0	0.0
286- 290	0	0.0	291- 295	1	16.7	296- 300	0	0.0
301- 305	1	16.7	306- 310	0	0.0	311- 315	0	0.0
				Total		6 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 188. Length-Frequency Data and Statistics for Vermilion Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	388	127.5	2717	1152065	260- 557

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
256- 260	1	14.3	261- 265	1	14.3	266- 270	1	14.3
271- 275	0	0.0	276- 280	0	0.0	281- 285	0	0.0
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	0	0.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	0	0.0	351- 355	0	0.0	356- 360	0	0.0
361- 365	0	0.0	366- 370	0	0.0	371- 375	0	0.0
376- 380	0	0.0	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	0	0.0	401- 405	0	0.0
406- 410	0	0.0	411- 415	0	0.0	416- 420	2	28.6
421- 425	0	0.0	426- 430	0	0.0	431- 435	0	0.0
436- 440	0	0.0	441- 445	0	0.0	446- 450	0	0.0
451- 455	0	0.0	456- 460	0	0.0	461- 465	0	0.0
466- 470	0	0.0	471- 475	0	0.0	476- 480	0	0.0
481- 485	0	0.0	486- 490	0	0.0	491- 495	0	0.0
496- 500	0	0.0	501- 505	0	0.0	506- 510	0	0.0
511- 515	0	0.0	516- 520	0	0.0	521- 525	0	0.0
526- 530	0	0.0	531- 535	1	14.3	536- 540	0	0.0
541- 545	0	0.0	546- 550	0	0.0	551- 555	0	0.0
556- 560	1	14.3	561- 565	0	0.0	566- 570	0	0.0
				Total		7 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 189. Length-Frequency Data and Statistics for Widow Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	186	307	31.2	57024	17662850	220- 430

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
216- 220	1	0.5	221- 225	1	0.5	226- 230	0	0.0
231- 235	1	0.5	236- 240	0	0.0	241- 245	0	0.0
246- 250	2	1.1	251- 255	2	1.1	256- 260	3	1.6
261- 265	3	1.6	266- 270	5	2.7	271- 275	6	3.2
276- 280	9	4.8	281- 285	10	5.4	286- 290	16	8.6
291- 295	15	8.1	296- 300	10	5.4	301- 305	11	5.9
306- 310	16	8.6	311- 315	7	3.8	316- 320	9	4.8
321- 325	8	4.3	326- 330	11	5.9	331- 335	9	4.8
336- 340	6	3.2	341- 345	7	3.8	346- 350	5	2.7
351- 355	4	2.2	356- 360	3	1.6	361- 365	1	0.5
366- 370	2	1.1	371- 375	1	0.5	376- 380	0	0.0
381- 385	0	0.0	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	0	0.0	416- 420	1	0.5	421- 425	0	0.0
426- 430	1	0.5	431- 435	0	0.0	436- 440	0	0.0

Total 186 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 190. Length-Frequency Data and Statistics for Yelloweye Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	451	186.5	2707	1395147	217- 680

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
216- 220	1	16.7	221- 225	0	0.0	226- 230	0	0.0
231- 235	0	0.0	236- 240	0	0.0	241- 245	0	0.0
246- 250	0	0.0	251- 255	0	0.0	256- 260	0	0.0
261- 265	0	0.0	266- 270	0	0.0	271- 275	1	16.7
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	0	0.0	296- 300	0	0.0	301- 305	0	0.0
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	0	0.0	346- 350	0	0.0
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	0	0.0
381- 385	0	0.0	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	0	0.0	416- 420	0	0.0	421- 425	0	0.0
426- 430	1	16.7	431- 435	0	0.0	436- 440	0	0.0
441- 445	0	0.0	446- 450	0	0.0	451- 455	0	0.0
456- 460	0	0.0	461- 465	0	0.0	466- 470	1	16.7
471- 475	0	0.0	476- 480	0	0.0	481- 485	0	0.0
486- 490	0	0.0	491- 495	0	0.0	496- 500	0	0.0
501- 505	0	0.0	506- 510	0	0.0	511- 515	0	0.0
516- 520	0	0.0	521- 525	0	0.0	526- 530	0	0.0
531- 535	0	0.0	536- 540	0	0.0	541- 545	0	0.0
546- 550	0	0.0	551- 555	0	0.0	556- 560	0	0.0
561- 565	0	0.0	566- 570	0	0.0	571- 575	0	0.0
576- 580	0	0.0	581- 585	0	0.0	586- 590	0	0.0
591- 595	0	0.0	596- 600	0	0.0	601- 605	0	0.0
606- 610	0	0.0	611- 615	0	0.0	616- 620	0	0.0
621- 625	0	0.0	626- 630	0	0.0	631- 635	0	0.0
636- 640	1	16.7	641- 645	0	0.0	646- 650	0	0.0
651- 655	0	0.0	656- 660	0	0.0	661- 665	0	0.0
666- 670	0	0.0	671- 675	0	0.0	676- 680	1	16.7
Total						6	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 191. Length-Frequency Data and Statistics for Yellowtail Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	312	324	70.2	101210	34363104	178- 530

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
176- 180	1	0.3	181- 185	0	0.0	186- 190	0	0.0
191- 195	0	0.0	196- 200	0	0.0	201- 205	1	0.3
206- 210	1	0.3	211- 215	2	0.6	216- 220	4	1.3
221- 225	4	1.3	226- 230	4	1.3	231- 235	5	1.6
236- 240	3	1.0	241- 245	3	1.0	246- 250	3	1.0
251- 255	9	2.9	256- 260	11	3.5	261- 265	11	3.5
266- 270	15	4.8	271- 275	11	3.5	276- 280	14	4.5
281- 285	10	3.2	286- 290	20	6.4	291- 295	9	2.9
296- 300	7	2.2	301- 305	10	3.2	306- 310	7	2.2
311- 315	10	3.2	316- 320	4	1.3	321- 325	9	2.9
326- 330	5	1.6	331- 335	2	0.6	336- 340	6	1.9
341- 345	1	0.3	346- 350	6	1.9	351- 355	4	1.3
356- 360	1	0.3	361- 365	3	1.0	366- 370	7	2.2
371- 375	6	1.9	376- 380	8	2.6	381- 385	4	1.3
386- 390	5	1.6	391- 395	6	1.9	396- 400	8	2.6
401- 405	4	1.3	406- 410	5	1.6	411- 415	3	1.0
416- 420	6	1.9	421- 425	4	1.3	426- 430	2	0.6
431- 435	4	1.3	436- 440	5	1.6	441- 445	1	0.3
446- 450	2	0.6	451- 455	0	0.0	456- 460	4	1.3
461- 465	0	0.0	466- 470	2	0.6	471- 475	1	0.3
476- 480	1	0.3	481- 485	0	0.0	486- 490	3	1.0
491- 495	1	0.3	496- 500	2	0.6	501- 505	0	0.0
506- 510	1	0.3	511- 515	0	0.0	516- 520	0	0.0
521- 525	0	0.0	526- 530	1	0.3	531- 535	0	0.0

Total	312	100%
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* Total length except for species with tuna-like caudal fin (see text).

Table 192. Length-Frequency Data and Statistics for Lingcod.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	701	82.2	5608	3978460	605- 840

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
601- 605	1	12.5	606- 610	1	12.5	611- 615	0	0.0
616- 620	0	0.0	621- 625	0	0.0	626- 630	0	0.0
631- 635	0	0.0	636- 640	0	0.0	641- 645	0	0.0
646- 650	1	12.5	651- 655	0	0.0	656- 660	0	0.0
661- 665	0	0.0	666- 670	0	0.0	671- 675	0	0.0
676- 680	1	12.5	681- 685	0	0.0	686- 690	0	0.0
691- 695	0	0.0	696- 700	0	0.0	701- 705	0	0.0
706- 710	0	0.0	711- 715	1	12.5	716- 720	0	0.0
721- 725	0	0.0	726- 730	0	0.0	731- 735	0	0.0
736- 740	0	0.0	741- 745	1	12.5	746- 750	0	0.0
751- 755	0	0.0	756- 760	0	0.0	761- 765	0	0.0
766- 770	1	12.5	771- 775	0	0.0	776- 780	0	0.0
781- 785	0	0.0	786- 790	0	0.0	791- 795	0	0.0
796- 800	0	0.0	801- 805	0	0.0	806- 810	0	0.0
811- 815	0	0.0	816- 820	0	0.0	821- 825	0	0.0
826- 830	0	0.0	831- 835	0	0.0	836- 840	1	12.5
Total						8	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 193. Length-Frequency Data and Statistics for Jack Mackerel.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	12	356	16.8	4267	1520393	320- 374

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
316- 320	1	8.3	321- 325	1	8.3	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	0	0.0	351- 355	3	25.0	356- 360	2	16.7
361- 365	2	16.7	366- 370	2	16.7	371- 375	1	8.3
Total						12	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 194. Length-Frequency Data and Statistics for Pacific Mackerel.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 4, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	74	318	21.7	23528	7514894	278- 382

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
276- 280	1	1.4	281- 285	2	2.7	286- 290	2	2.7
291- 295	3	4.1	296- 300	9	12.2	301- 305	11	14.9
306- 310	5	6.8	311- 315	3	4.1	316- 320	6	8.1
321- 325	12	16.2	326- 330	1	1.4	331- 335	5	6.8
336- 340	3	4.1	341- 345	2	2.7	346- 350	2	2.7
351- 355	2	2.7	356- 360	2	2.7	361- 365	0	0.0
366- 370	1	1.4	371- 375	1	1.4	376- 380	0	0.0
381- 385	1	1.4	386- 390	0	0.0	391- 395	0	0.0
Total						74	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 195. Length-Frequency Data and Statistics for White Croaker.
Taken by Pier or Dock Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	234	17.6	1874	441146	204- 252

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	1	12.5	206- 210	0	0.0	211- 215	0	0.0
216- 220	0	0.0	221- 225	2	25.0	226- 230	1	12.5
231- 235	0	0.0	236- 240	0	0.0	241- 245	0	0.0
246- 250	2	25.0	251- 255	2	25.0	256- 260	0	0.0
Total							8	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 196. Length-Frequency Data and Statistics for Grass Rockfish.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	294	64.9	1469	448419	221- 386

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
221- 225	1	20.0	226- 230	0	0.0	231- 235	0	0.0
236- 240	0	0.0	241- 245	0	0.0	246- 250	0	0.0
251- 255	0	0.0	256- 260	0	0.0	261- 265	1	20.0
266- 270	1	20.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	0	0.0	286- 290	0	0.0	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	1	20.0	336- 340	0	0.0
341- 345	0	0.0	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	1	20.0	391- 395	0	0.0	396- 400	0	0.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 197. Length-Frequency Data and Statistics for Opaleye.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*		N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
		21	216	35.3	4543	1007767	128- 283

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
126- 130	1	4.8	131- 135	0	0.0	136- 140	0	0.0
141- 145	0	0.0	146- 150	0	0.0	151- 155	0	0.0
156- 160	0	0.0	161- 165	0	0.0	166- 170	0	0.0
171- 175	1	4.8	176- 180	2	9.5	181- 185	0	0.0
186- 190	0	0.0	191- 195	1	4.8	196- 200	0	0.0
201- 205	2	9.5	206- 210	2	9.5	211- 215	2	9.5
216- 220	1	4.8	221- 225	0	0.0	226- 230	0	0.0
231- 235	2	9.5	236- 240	2	9.5	241- 245	1	4.8
246- 250	1	4.8	251- 255	1	4.8	256- 260	0	0.0
261- 265	1	4.8	266- 270	0	0.0	271- 275	0	0.0
276- 280	0	0.0	281- 285	1	4.8	286- 290	0	0.0
Total 21 100%								

* Total length except for species with tuna-like caudal fin (see text).

Table 198. Length-Frequency Data and Statistics for Barred Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	26	242	43.6	6294	1571096	184- 340

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
181- 185	2	7.7	186- 190	0	0.0	191- 195	1	3.8
196- 200	3	11.5	201- 205	2	7.7	206- 210	1	3.8
211- 215	1	3.8	216- 220	0	0.0	221- 225	1	3.8
226- 230	1	3.8	231- 235	1	3.8	236- 240	0	0.0
241- 245	0	0.0	246- 250	1	3.8	251- 255	2	7.7
256- 260	1	3.8	261- 265	0	0.0	266- 270	2	7.7
271- 275	0	0.0	276- 280	1	3.8	281- 285	2	7.7
286- 290	1	3.8	291- 295	1	3.8	296- 300	0	0.0
301- 305	0	0.0	306- 310	0	0.0	311- 315	1	3.8
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	1	3.8	341- 345	0	0.0
Total						26	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 199. Length-Frequency Data and Statistics for Black Perch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	224	57.1	1119	263479	145- 295

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
141- 145	1	20.0	146- 150	0	0.0	151- 155	0	0.0
156- 160	0	0.0	161- 165	0	0.0	166- 170	0	0.0
171- 175	0	0.0	176- 180	0	0.0	181- 185	0	0.0
186- 190	0	0.0	191- 195	0	0.0	196- 200	1	20.0
201- 205	0	0.0	206- 210	0	0.0	211- 215	0	0.0
216- 220	0	0.0	221- 225	1	20.0	226- 230	0	0.0
231- 235	0	0.0	236- 240	0	0.0	241- 245	0	0.0
246- 250	0	0.0	251- 255	0	0.0	256- 260	1	20.0
261- 265	0	0.0	266- 270	0	0.0	271- 275	0	0.0
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	1	20.0	296- 300	0	0.0	301- 305	0	0.0
Total						5	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 200. Length-Frequency Data and Statistics for Calico Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	224	20.5	1789	403003	198- 249

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	2	25.0	201- 205	0	0.0	206- 210	1	12.5
211- 215	0	0.0	216- 220	0	0.0	221- 225	2	25.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	2	25.0	246- 250	1	12.5	251- 255	0	0.0
Total							8	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 201. Length-Frequency Data and Statistics for Silver Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	24	199	12.5	4773	952811	177- 224

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
176- 180	2	8.3	181- 185	1	4.2	186- 190	4	16.7
191- 195	2	8.3	196- 200	3	12.5	201- 205	6	25.0
206- 210	2	8.3	211- 215	2	8.3	216- 220	1	4.2
221- 225	1	4.2	226- 230	0	0.0	231- 235	0	0.0
Total							24	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 202. Length-Frequency Data and Statistics for Striped Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	303	39.3	1816	557358	235- 337

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
231- 235	1	16.7	236- 240	0	0.0	241- 245	0	0.0
246- 250	0	0.0	251- 255	0	0.0	256- 260	0	0.0
261- 265	0	0.0	266- 270	0	0.0	271- 275	0	0.0
276- 280	0	0.0	281- 285	0	0.0	286- 290	1	16.7
291- 295	1	16.7	296- 300	0	0.0	301- 305	0	0.0
306- 310	0	0.0	311- 315	0	0.0	316- 320	0	0.0
321- 325	1	16.7	326- 330	0	0.0	331- 335	0	0.0
336- 340	2	33.3	341- 345	0	0.0	346- 350	0	0.0
Total						6	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 203. Length-Frequency Data and Statistics for Walleye Surfperch.
Taken by Beach and Bank Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	11	222	16.1	2441	544257	199- 244

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	1	9.1	201- 205	2	18.2	206- 210	0	0.0
211- 215	2	18.2	216- 220	0	0.0	221- 225	1	9.1
226- 230	0	0.0	231- 235	2	18.2	236- 240	2	18.2
241- 245	1	9.1	246- 250	0	0.0	251- 255	0	0.0
Total						11	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 204. Length-Frequency Data and Statistics for Bocaccio.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	37	277	37.3	10258	2894002	255- 493

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
251- 255	1	2.7	256- 260	3	8.1	261- 265	6	16.2
266- 270	8	21.6	271- 275	6	16.2	276- 280	8	21.6
281- 285	3	8.1	286- 290	1	2.7	291- 295	0	0.0
296- 300	0	0.0	301- 305	0	0.0	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	0	0.0	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	0	0.0
461- 465	0	0.0	466- 470	0	0.0	471- 475	0	0.0
476- 480	0	0.0	481- 485	0	0.0	486- 490	0	0.0
491- 495	1	2.7	496- 500	0	0.0	501- 505	0	0.0
Total						37	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 205. Length-Frequency Data and Statistics for Black Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	6	277	30.5	1661	464479	244- 321

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
241- 245	1	16.7	246- 250	0	0.0	251- 255	1	16.7
256- 260	0	0.0	261- 265	1	16.7	266- 270	0	0.0
271- 275	0	0.0	276- 280	1	16.7	281- 285	0	0.0
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	1	16.7	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	1	16.7	326- 330	0	0.0
Total							6	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 206. Length-Frequency Data and Statistics for Black-and-yellow Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	9	271	20.2	2437	663161	250- 310

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
246- 250	1	11.1	251- 255	2	22.2	256- 260	0	0.0
261- 265	2	22.2	266- 270	0	0.0	271- 275	1	11.1
276- 280	0	0.0	281- 285	1	11.1	286- 290	1	11.1
291- 295	0	0.0	296- 300	0	0.0	301- 305	0	0.0
306- 310	1	11.1	311- 315	0	0.0	316- 320	0	0.0
Total							9	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 207. Length-Frequency Data and Statistics for Blue Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	85	280	41.6	23779	6797853	207- 402

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
206- 210	1	1.2	211- 215	0	0.0	216- 220	2	2.4
221- 225	2	2.4	226- 230	4	4.7	231- 235	4	4.7
236- 240	1	1.2	241- 245	2	2.4	246- 250	4	4.7
251- 255	7	8.2	256- 260	4	4.7	261- 265	5	5.9
266- 270	3	3.5	271- 275	6	7.1	276- 280	5	5.9
281- 285	3	3.5	286- 290	2	2.4	291- 295	6	7.1
296- 300	1	1.2	301- 305	0	0.0	306- 310	3	3.5
311- 315	3	3.5	316- 320	4	4.7	321- 325	3	3.5
326- 330	0	0.0	331- 335	1	1.2	336- 340	2	2.4
341- 345	2	2.4	346- 350	0	0.0	351- 355	0	0.0
356- 360	0	0.0	361- 365	1	1.2	366- 370	0	0.0
371- 375	0	0.0	376- 380	1	1.2	381- 385	1	1.2
386- 390	1	1.2	391- 395	0	0.0	396- 400	0	0.0
401- 405	1	1.2	406- 410	0	0.0	411- 415	0	0.0
Total						85	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 208. Length-Frequency Data and Statistics for Brown Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	13	339	48.5	4406	1521466	253- 403

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
251- 255	1	7.7	256- 260	0	0.0	261- 265	0	0.0
266- 270	0	0.0	271- 275	0	0.0	276- 280	0	0.0
281- 285	0	0.0	286- 290	2	15.4	291- 295	1	7.7
296- 300	0	0.0	301- 305	1	7.7	306- 310	0	0.0
311- 315	0	0.0	316- 320	0	0.0	321- 325	0	0.0
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	7.7	346- 350	0	0.0	351- 355	0	0.0
356- 360	3	23.1	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	1	7.7	381- 385	1	7.7
386- 390	0	0.0	391- 395	0	0.0	396- 400	1	7.7
401- 405	1	7.7	406- 410	0	0.0	411- 415	0	0.0

Total 13 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 209. Length-Frequency Data and Statistics for Canary Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	31	342	52.8	10602	3709418	242- 419

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
241- 245	1	3.2	246- 250	1	3.2	251- 255	0	0.0
256- 260	0	0.0	261- 265	1	3.2	266- 270	1	3.2
271- 275	2	6.5	276- 280	0	0.0	281- 285	1	3.2
286- 290	0	0.0	291- 295	1	3.2	296- 300	0	0.0
301- 305	0	0.0	306- 310	1	3.2	311- 315	0	0.0
316- 320	1	3.2	321- 325	0	0.0	326- 330	2	6.5
331- 335	1	3.2	336- 340	1	3.2	341- 345	0	0.0
346- 350	1	3.2	351- 355	0	0.0	356- 360	0	0.0
361- 365	0	0.0	366- 370	3	9.7	371- 375	2	6.5
376- 380	3	9.7	381- 385	2	6.5	386- 390	1	3.2
391- 395	1	3.2	396- 400	1	3.2	401- 405	1	3.2
406- 410	0	0.0	411- 415	1	3.2	416- 420	1	3.2
			Total			31 100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 210. Length-Frequency Data and Statistics for Copper Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	18	362	78.2	6520	2465530	257- 501

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
256- 260	1	5.6	261- 265	0	0.0	266- 270	1	5.6
271- 275	0	0.0	276- 280	0	0.0	281- 285	1	5.6
286- 290	0	0.0	291- 295	0	0.0	296- 300	2	11.1
301- 305	1	5.6	306- 310	0	0.0	311- 315	0	0.0
316- 320	2	11.1	321- 325	0	0.0	326- 330	1	5.6
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	0	0.0	351- 355	0	0.0	356- 360	2	11.1
361- 365	0	0.0	366- 370	0	0.0	371- 375	0	0.0
376- 380	0	0.0	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	1	5.6	401- 405	1	5.6
406- 410	0	0.0	411- 415	0	0.0	416- 420	0	0.0
421- 425	0	0.0	426- 430	0	0.0	431- 435	1	5.6
436- 440	0	0.0	441- 445	1	5.6	446- 450	0	0.0
451- 455	0	0.0	456- 460	0	0.0	461- 465	0	0.0
466- 470	1	5.6	471- 475	0	0.0	476- 480	0	0.0
481- 485	0	0.0	486- 490	1	5.6	491- 495	0	0.0
496- 500	0	0.0	501- 505	1	5.6	506- 510	0	0.0
Total			18			100%		

* Total length except for species with tuna-like caudal fin (see text).

Table 211. Length-Frequency Data and Statistics for Gopher Rockfish.
 Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	43	286	29.5	12317	3564613	203- 337

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	1	2.3	206- 210	0	0.0	211- 215	0	0.0
216- 220	1	2.3	221- 225	0	0.0	226- 230	0	0.0
231- 235	0	0.0	236- 240	0	0.0	241- 245	1	2.3
246- 250	4	9.3	251- 255	1	2.3	256- 260	0	0.0
261- 265	2	4.7	266- 270	0	0.0	271- 275	2	4.7
276- 280	2	4.7	281- 285	3	7.0	286- 290	5	11.6
291- 295	5	11.6	296- 300	0	0.0	301- 305	6	14.0
306- 310	2	4.7	311- 315	3	7.0	316- 320	0	0.0
321- 325	1	2.3	326- 330	2	4.7	331- 335	1	2.3
336- 340	1	2.3	341- 345	0	0.0	346- 350	0	0.0

Total 43 100%

* Total length except for species with tuna-like caudal fin (see text).

Table 212. Length-Frequency Data and Statistics for Green-spotted Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	20	318	61.8	6367	2099479	211- 413

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	5.0	216- 220	0	0.0	221- 225	2	10.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	1	5.0	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	1	5.0	266- 270	0	0.0
271- 275	0	0.0	276- 280	1	5.0	281- 285	1	5.0
286- 290	0	0.0	291- 295	1	5.0	296- 300	0	0.0
301- 305	0	0.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	2	10.0	326- 330	0	0.0
331- 335	1	5.0	336- 340	0	0.0	341- 345	1	5.0
346- 350	0	0.0	351- 355	1	5.0	356- 360	1	5.0
361- 365	0	0.0	366- 370	1	5.0	371- 375	2	10.0
376- 380	0	0.0	381- 385	0	0.0	386- 390	0	0.0
391- 395	2	10.0	396- 400	0	0.0	401- 405	0	0.0
406- 410	0	0.0	411- 415	1	5.0	416- 420	0	0.0
Total							20	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 213. Length-Frequency Data and Statistics for Green-striped Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	259	35.7	2075	547139	214- 309

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	12.5	216- 220	1	12.5	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	1	12.5	246- 250	0	0.0	251- 255	2	25.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	0	0.0
271- 275	0	0.0	276- 280	0	0.0	281- 285	1	12.5
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	1	12.5	306- 310	1	12.5	311- 315	0	0.0
Total							8	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 214. Length-Frequency Data and Statistics for Kelp Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	297	18.0	2079	619397	277- 324

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
276- 280	1	14.3	281- 285	2	28.6	286- 290	0	0.0
291- 295	1	14.3	296- 300	0	0.0	301- 305	0	0.0
306- 310	1	14.3	311- 315	1	14.3	316- 320	0	0.0
321- 325	1	14.3	326- 330	0	0.0	331- 335	0	0.0
Total							7	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 215. Length-Frequency Data and Statistics for Olive Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	26	310	26.7	8058	2515136	263- 357

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
261- 265	1	3.8	266- 270	1	3.8	271- 275	0	0.0
276- 280	0	0.0	281- 285	4	15.4	286- 290	2	7.7
291- 295	0	0.0	296- 300	4	15.4	301- 305	1	3.8
306- 310	1	3.8	311- 315	2	7.7	316- 320	1	3.8
321- 325	1	3.8	326- 330	2	7.7	331- 335	0	0.0
336- 340	1	3.8	341- 345 *	0	0.0	346- 350	4	15.4
351- 355	0	0.0	356- 360	1	3.8	361- 365	0	0.0
Total							26	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 216. Length-Frequency Data and Statistics for Rosy Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	18	234	20.0	4215	993827	196- 276

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	1	5.6	201- 205	1	5.6	206- 210	0	0.0
211- 215	0	0.0	216- 220	2	11.1	221- 225	2	11.1
226- 230	2	11.1	231- 235	1	5.6	236- 240	2	11.1
241- 245	3	16.7	246- 250	0	0.0	251- 255	1	5.6
256- 260	1	5.6	261- 265	1	5.6	266- 270	0	0.0
271- 275	0	0.0	276- 280	1	5.6	281- 285	0	0.0
Total							18	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 217. Length-Frequency Data and Statistics for Starry Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	18	313	52.5	5632	1809030	229- 400

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
226- 230	1	5.6	231- 235	0	0.0	236- 240	0	0.0
241- 245	0	0.0	246- 250	1	5.6	251- 255	2	11.1
256- 260	0	0.0	261- 265	0	0.0	266- 270	2	11.1
271- 275	0	0.0	276- 280	0	0.0	281- 285	0	0.0
286- 290	0	0.0	291- 295	2	11.1	296- 300	0	0.0
301- 305	0	0.0	306- 310	1	5.6	311- 315	1	5.6
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	1	5.6
346- 350	1	5.6	351- 355	2	11.1	356- 360	0	0.0
361- 365	0	0.0	366- 370	2	11.1	371- 375	1	5.6
376- 380	0	0.0	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	1	5.6	401- 405	0	0.0
Total							18	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 218. Length-Frequency Data and Statistics for Vermilion Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	14	402	95.1	5626	2378476	181- 555

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
181- 185	1	7.1	186- 190	0	0.0	191- 195	0	0.0
196- 200	0	0.0	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	0	0.0	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	0	0.0
271- 275	1	7.1	276- 280	0	0.0	281- 285	0	0.0
286- 290	0	0.0	291- 295	0	0.0	296- 300	0	0.0
301- 305	0	0.0	306- 310	0	0.0	311- 315	0	0.0
316- 320	0	0.0	321- 325	0	0.0	326- 330	0	0.0
331- 335	0	0.0	336- 340	0	0.0	341- 345	0	0.0
346- 350	0	0.0	351- 355	1	7.1	356- 360	1	7.1
361- 365	1	7.1	366- 370	0	0.0	371- 375	0	0.0
376- 380	1	7.1	381- 385	0	0.0	386- 390	0	0.0
391- 395	0	0.0	396- 400	0	0.0	401- 405	1	7.1
406- 410	0	0.0	411- 415	0	0.0	416- 420	0	0.0
421- 425	1	7.1	426- 430	0	0.0	431- 435	0	0.0
436- 440	0	0.0	441- 445	0	0.0	446- 450	1	7.1
451- 455	0	0.0	456- 460	0	0.0	461- 465	1	7.1
466- 470	1	7.1	471- 475	1	7.1	476- 480	0	0.0
481- 485	0	0.0	486- 490	1	7.1	491- 495	0	0.0
496- 500	0	0.0	501- 505	0	0.0	506- 510	0	0.0
511- 515	0	0.0	516- 520	0	0.0	521- 525	0	0.0
526- 530	0	0.0	531- 535	0	0.0	536- 540	0	0.0
541- 545	0	0.0	546- 550	0	0.0	551- 555	1	7.1
Total						14	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 219. Length-Frequency Data and Statistics for Widow Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	22	277	33.9	6103	1717197	221- 331

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
221- 225	2	9.1	226- 230	0	0.0	231- 235	2	9.1
236- 240	1	4.5	241- 245	0	0.0	246- 250	1	4.5
251- 255	1	4.5	256- 260	1	4.5	261- 265	0	0.0
266- 270	1	4.5	271- 275	0	0.0	276- 280	2	9.1
281- 285	0	0.0	286- 290	1	4.5	291- 295	1	4.5
296- 300	2	9.1	301- 305	3	13.6	306- 310	1	4.5
311- 315	0	0.0	316- 320	1	4.5	321- 325	1	4.5
326- 330	0	0.0	331- 335	1	4.5	336- 340	0	0.0
Total							22	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 220. Length-Frequency Data and Statistics for Yelloweye Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	406	72.4	2841	1184463	328- 502

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
326- 330	1	14.3	331- 335	1	14.3	336- 340	0	0.0
341- 345	0	0.0	346- 350	1	14.3	351- 355	0	0.0
356- 360	0	0.0	361- 365	0	0.0	366- 370	0	0.0
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	0	0.0	391- 395	0	0.0	396- 400	0	0.0
401- 405	1	14.3	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	1	14.3
461- 465	0	0.0	466- 470	0	0.0	471- 475	1	14.3
476- 480	0	0.0	481- 485	0	0.0	486- 490	0	0.0
491- 495	0	0.0	496- 500	0	0.0	501- 505	1	14.3
Total							7	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 221. Length-Frequency Data and Statistics for Yellowtail Rockfish.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	67	286	38.8	19166	5581830	208- 458

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
206- 210	1	1.5	211- 215	0	0.0	216- 220	0	0.0
221- 225	0	0.0	226- 230	0	0.0	231- 235	0	0.0
236- 240	2	3.0	241- 245	1	1.5	246- 250	2	3.0
251- 255	4	6.0	256- 260	3	4.5	261- 265	7	10.4
266- 270	7	10.4	271- 275	6	9.0	276- 280	4	6.0
281- 285	5	7.5	286- 290	1	1.5	291- 295	3	4.5
296- 300	4	6.0	301- 305	1	1.5	306- 310	3	4.5
311- 315	3	4.5	316- 320	1	1.5	321- 325	2	3.0
326- 330	1	1.5	331- 335	0	0.0	336- 340	0	0.0
341- 345	1	1.5	346- 350	1	1.5	351- 355	0	0.0
356- 360	0	0.0	361- 365	1	1.5	366- 370	1	1.5
371- 375	0	0.0	376- 380	0	0.0	381- 385	0	0.0
386- 390	1	1.5	391- 395	0	0.0	396- 400	0	0.0
401- 405	0	0.0	406- 410	0	0.0	411- 415	0	0.0
416- 420	0	0.0	421- 425	0	0.0	426- 430	0	0.0
431- 435	0	0.0	436- 440	0	0.0	441- 445	0	0.0
446- 450	0	0.0	451- 455	0	0.0	456- 460	1	1.5
Total						67	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 222. Length-Frequency Data and Statistics for Pacific Mackerel.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	7	297	18.6	2076	617756	270- 321

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
266- 270	1	14.3	271- 275	0	0.0	276- 280	0	0.0
281- 285	1	14.3	286- 290	1	14.3	291- 295	1	14.3
296- 300	0	0.0	301- 305	0	0.0	306- 310	1	14.3
311- 315	1	14.3	316- 320	0	0.0	321- 325	1	14.3
Total							7	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 223. Length-Frequency Data and Statistics for White Croaker.
Taken by Private or Rental Boat Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	15	261	27.8	3917	1033671	204- 297

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
201- 205	1	6.7	206- 210	0	0.0	211- 215	0	0.0
216- 220	0	0.0	221- 225	0	0.0	226- 230	1	6.7
231- 235	1	6.7	236- 240	0	0.0	241- 245	2	13.3
246- 250	1	6.7	251- 255	0	0.0	256- 260	1	6.7
261- 265	1	6.7	266- 270	0	0.0	271- 275	2	13.3
276- 280	1	6.7	281- 285	0	0.0	286- 290	1	6.7
291- 295	0	0.0	296- 300	3	20.0	301- 305	0	0.0
Total							15	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 224. Length-Frequency Data and Statistics for Blue Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	13	253	18.4	3285	834139	229- 289

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
226- 230	1	7.7	231- 235	1	7.7	236- 240	3	23.1
241- 245	2	15.4	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	3	23.1	266- 270	1	7.7
271- 275	1	7.7	276- 280	0	0.0	281- 285	0	0.0
286- 290	1	7.7	291- 295	0	0.0	296- 300	0	0.0
Total							13	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 225. Length-Frequency Data and Statistics for Brown Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	9	333	59.2	3000	1028044	247- 419

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
246- 250	1	11.1	251- 255	0	0.0	256- 260	0	0.0
261- 265	1	11.1	266- 270	0	0.0	271- 275	0	0.0
276- 280	0	0.0	281- 285	0	0.0	286- 290	0	0.0
291- 295	0	0.0	296- 300	0	0.0	301- 305	1	11.1
306- 310	0	0.0	311- 315	1	11.1	316- 320	0	0.0
321- 325	0	0.0	326- 330	0	0.0	331- 335	0	0.0
336- 340	0	0.0	341- 345	2	22.2	346- 350	1	11.1
351- 355	0	0.0	356- 360	0	0.0	361- 365	0	0.0
366- 370	0	0.0	371- 375	0	0.0	376- 380	0	0.0
381- 385	0	0.0	386- 390	0	0.0	391- 395	0	0.0
396- 400	0	0.0	401- 405	0	0.0	406- 410	0	0.0
411- 415	0	0.0	416- 420	2	22.2	421- 425	0	0.0
Total							9	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 226. Length-Frequency Data and Statistics for Chilipepper.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	85	411	62.8	34900	14661282	284- 520

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
281- 285	2	2.4	286- 290	0	0.0	291- 295	2	2.4
296- 300	0	0.0	301- 305	1	1.2	306- 310	1	1.2
311- 315	1	1.2	316- 320	1	1.2	321- 325	0	0.0
326- 330	2	2.4	331- 335	4	4.7	336- 340	2	2.4
341- 345	4	4.7	346- 350	1	1.2	351- 355	0	0.0
356- 360	3	3.5	361- 365	0	0.0	366- 370	0	0.0
371- 375	1	1.2	376- 380	1	1.2	381- 385	1	1.2
386- 390	4	4.7	391- 395	4	4.7	396- 400	3	3.5
401- 405	1	1.2	406- 410	0	0.0	411- 415	1	1.2
416- 420	0	0.0	421- 425	1	1.2	426- 430	0	0.0
431- 435	5	5.9	436- 440	4	4.7	441- 445	2	2.4
446- 450	4	4.7	451- 455	5	5.9	456- 460	6	7.1
461- 465	5	5.9	466- 470	0	0.0	471- 475	0	0.0
476- 480	2	2.4	481- 485	2	2.4	486- 490	4	4.7
491- 495	1	1.2	496- 500	0	0.0	501- 505	0	0.0
506- 510	2	2.4	511- 515	0	0.0	516- 520	2	2.4
Total							85	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 227. Length-Frequency Data and Statistics for Gopher Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear,
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	41	288	30.7	11822	3446552	196- 337

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
196- 200	1	2.4	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	1	2.4
241- 245	2	4.9	246- 250	1	2.4	251- 255	2	4.9
256- 260	2	4.9	261- 265	0	0.0	266- 270	1	2.4
271- 275	1	2.4	276- 280	4	9.8	281- 285	1	2.4
286- 290	5	12.2	291- 295	3	7.3	296- 300	0	0.0
301- 305	1	2.4	306- 310	7	17.1	311- 315	3	7.3
316- 320	1	2.4	321- 325	1	2.4	326- 330	1	2.4
331- 335	0	0.0	336- 340	3	7.3	341- 345	0	0.0
Total						41	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 228. Length-Frequency Data and Statistics for Olive Rockfish.
 Taken by All CPFV Anglers Using Hook-and-Line Gear,
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	21	321	39.6	6734	2190760	229- 389

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
226- 230	1	4.8	231- 235	0	0.0	236- 240	0	0.0
241- 245	0	0.0	246- 250	0	0.0	251- 255	0	0.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	1	4.8
271- 275	0	0.0	276- 280	1	4.8	281- 285	0	0.0
286- 290	1	4.8	291- 295	1	4.8	296- 300	0	0.0
301- 305	3	14.3	306- 310	1	4.8	311- 315	1	4.8
316- 320	1	4.8	321- 325	2	9.5	326- 330	0	0.0
331- 335	0	0.0	336- 340	2	9.5	341- 345	1	4.8
346- 350	0	0.0	351- 355	1	4.8	356- 360	1	4.8
361- 365	0	0.0	366- 370	0	0.0	371- 375	0	0.0
376- 380	0	0.0	381- 385	2	9.5	386- 390	1	4.8
Total						21	100%	

* Total length except for species with tuna-like caudal fin (see text).

Table 229. Length-Frequency Data and Statistics for Rosy Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	5	227	41.4	1137	265403	183- 273

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
181- 185	2	40.0	186- 190	0	0.0	191- 195	0	0.0
196- 200	0	0.0	201- 205	0	0.0	206- 210	0	0.0
211- 215	0	0.0	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	0	0.0	236- 240	0	0.0
241- 245	1	20.0	246- 250	0	0.0	251- 255	1	20.0
256- 260	0	0.0	261- 265	0	0.0	266- 270	0	0.0
271- 275	1	20.0	276- 280	0	0.0	281- 285	0	0.0
Total							5	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 230. Length-Frequency Data and Statistics for Yellowtail Rockfish.
Taken by All CPFV Anglers Using Hook-and-Line Gear.
Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	30	261	23.7	7828	2058880	212- 304

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
211- 215	1	3.3	216- 220	0	0.0	221- 225	0	0.0
226- 230	0	0.0	231- 235	1	3.3	236- 240	3	10.0
241- 245	6	20.0	246- 250	2	6.7	251- 255	3	10.0
256- 260	0	0.0	261- 265	3	10.0	266- 270	2	6.7
271- 275	1	3.3	276- 280	0	0.0	281- 285	1	3.3
286- 290	2	6.7	291- 295	2	6.7	296- 300	2	6.7
301- 305	1	3.3	306- 310	0	0.0	311- 315	0	0.0
Total							30	100%

* Total length except for species with tuna-like caudal fin (see text).

Table 231. Length-Frequency Data and Statistics for Pacific Mackerel.
 Taken by All CPFV Anglers Using Hook-and-Line Gear.
 Area 5, Quarter 1, 1985.

Length(mm)*	N	Mean	St.Dev.	Sum Lengths	Sum of Squar.	Range
	8	319	16.8	2551	815435	297- 342

Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.	Limits(mm)	Fq.	%Fq.
296- 300	1	12.5	301- 305	1	12.5	306- 310	1	12.5
311- 315	0	0.0	316- 320	2	25.0	321- 325	1	12.5
326- 330	0	0.0	331- 335	0	0.0	336- 340	0	0.0
341- 345	2	25.0	346- 350	0	0.0	351- 355	0	0.0
Total							8	100%

* Total length except for species with tuna-like caudal fin (see text).

APPENDIX B. List of Scientific Names, Common Names, and Length-Weight Parameters from All Areas in 1985 for Quarter 1, Taken by All Mode Anglers Using All Types of Gear.

Common Name	Scientific Name	a	b
Sturgeon, Green	<u>Acipenser medirostris</u>	0.00000053086	3.34800
Sturgeon, White	<u>Acipenser transmontanus</u>	0.00000053086	3.34800
Sturgeons (unidentified)	<u>Acipenseridae</u>	0.00000053086	3.34800
Sturgeons (general)	<u>Acipenseridae</u>	0.00000053086	3.34800
Surfperch, Barred	<u>Amphistichus argenteus</u>	0.00001070000	3.10250
Surfperch, Calico	<u>Amphistichus koelzi</u>	0.00000469894	3.22700
Surfperch, Redtail	<u>Amphistichus rhodoterus</u>	0.00000469894	3.22700
Wolf-eel	<u>Anarrichthys ocellatus</u>	0.00000502500	3.09100
Sablefish	<u>Anoplopoma fimbria</u>	0.00002248980	2.84080
Jacksmelt	<u>Atherinopsis californiensis</u>	0.00000098820	3.35360
Flounders, Lefteye	<u>Bothidae</u>		
Prickleback, Monkeyface	<u>Cebidichthys violaceus</u>	0.00000000000	0.00000
Sharks	<u>Chondrichthyes</u>	0.00000000000	0.00000
Sanddab, Pacific	<u>Citharichthys sordidus</u>	0.00000142860	3.37080
Sanddab, Speckled	<u>Citharichthys stigmaeus</u>	0.00000266000	3.29530
Sculpins	<u>Cottidae</u>	0.00000000000	0.00000
Stingrays	<u>Dasyatidae</u>		
Perch, Black	<u>Embiotoca jacksoni</u>	0.00029100000	2.49640
Seaperch, Striped	<u>Embiotoca lateralis</u>	0.00001540000	3.01000
Surfperches	<u>Embiotocidae</u>	0.00000000000	0.00000
Sculpin, Buffalo	<u>Enophrys bison</u>	0.00001790000	2.89600
Sole, Petrale	<u>Eopsetta jordani</u>	0.00000305800	3.23950
Croaker, White	<u>Genyonemus lineatus</u>	0.00000708500	3.08328
Opaleye	<u>Girella nigricans</u>	0.00001448300	3.04927
Irish Lord, Red	<u>Hemilepidotus hemilepidotus</u>	0.00003580000	2.89600
Greenlings (general)	<u>Hexagrammidae</u>	0.00002604300	2.89280
Greenling, Kelp	<u>Hexagrammos decagrammus</u>	0.00002604300	2.89280
Greenling, Rock	<u>Hexagrammos lagocephalus</u>	0.00002604300	2.89280
Surfperch, Walleye	<u>Hyperprosopon argenteum</u>	0.00000035580	3.71700
Surfperch, Silver	<u>Hyperprosopon ellipticum</u>	0.00000469894	3.22700
Sole, Rock	<u>Lepidopsetta bilineata</u>	0.00000760300	3.09570
Sculpin, Pacific Staghorn	<u>Leptocottus armatus</u>	0.00001790000	2.89600
Tomcod, Pacific	<u>Microgadus proximus</u>	0.00000534900	3.07000
Bass, Striped	<u>Morone saxatilis</u>	0.00001068210	2.90671
Smoothhound, Gray	<u>Mustelus californicus</u>	0.00002089000	2.88000
Eagle Rays	<u>Myliobatidae</u>		
Ray, Bat	<u>Myliobatis californica</u>	0.00001054400	3.09289
Shark, Sevengill	<u>Notorynchus maculatus</u>	0.00000070600	3.49000
Salmon, Coho (Silver)	<u>Oncorhynchus kisutch</u>	0.00000944000	3.00000
Lingcod	<u>Ophiodon elongatus</u>	0.00001157000	2.99000
Senorita	<u>Oxyjulis californica</u>	0.00000450000	3.16000
Sand bass, Barred	<u>Paralabrax nebulifer</u>	0.00000684400	3.11289
Halibut, California	<u>Paralichthys californicus</u>	0.00000849000	3.03300
Seaperch, Sharpnose	<u>Phanerodon atripes</u>	0.00001370000	2.98000

APPENDIX B (continued)

Common Name	Scientific Name	a	b
Seaperch, White	<u>Phanerodon furcatus</u>	0.00001366000	2.97800
Flounder, Starry	<u>Platichthys stellatus</u>	0.00000163000	3.34000
Flounders, Righteye	<u>Pleuronectidae</u>	0.00000305800	3.24000
Flatfishes	<u>Pleuronectiformes</u>		
Sole, Sand	<u>Psettichthys melanostictus</u>	0.00000277100	3.26480
Skate, Big	<u>Raja binoculata</u>	0.00002428050	2.85496
Skate, California	<u>Raja inornata</u>	0.00002430000	2.85000
Skates	<u>Rajidae</u>		
Perch, Pile	<u>Rhacochilus vacca</u>	0.00000925500	3.09900
Trout, Rainbow	<u>Salmo gairdnerii</u>	0.00000637000	3.06300
Mackerel, Pacific (Chub)	<u>Scomber japonicus</u>	0.00000136600	3.39360
Cabezon	<u>Scorpaenichthys marmoratus</u>	0.00008823220	2.72030
Rockfishes (unidentified)	<u>Scorpaenidae</u>	0.00000521020	3.15410
Rockfish, Kelp	<u>Sebastes atrovirens</u>	0.00003277410	2.86200
Rockfish, Brown	<u>Sebastes auriculatus</u>	0.00002601290	2.93360
Rockfish, Gopher	<u>Sebastes carnatus</u>	0.00002047310	2.95730
Rockfish, Copper	<u>Sebastes caurinus</u>	0.00001648140	3.01800
Rockfish, Greenspotted	<u>Sebastes chlorostictus</u>	0.00002047310	2.95730
Rockfish, Black-and-yellow	<u>Sebastes chrysomelas</u>	0.00000446010	3.25650
Rockfish, Starry	<u>Sebastes constellatus</u>	0.00000531230	3.19500
Rockfish, Splitnose	<u>Sebastes diploproa</u>	0.00000283950	3.24380
Rockfish, Greenstriped	<u>Sebastes elongatus</u>	0.00000475820	3.15310
Rockfish, Swordspine	<u>Sebastes ensifer</u>	0.00000446010	3.25650
Rockfish, Widow	<u>Sebastes entomelas</u>	0.00000291200	3.25430
Rockfish, Yellowtail	<u>Sebastes flavidus</u>	0.00001130400	3.04020
Chilipepper	<u>Sebastes goodei</u>	0.00000283950	3.24380
Rockfish, Rosethorn	<u>Sebastes helvomaculatus</u>	0.00001678550	2.99430
Rockfish, Squarespot	<u>Sebastes hopkinsi</u>	0.00000324000	3.25050
Rockfish, Quillback	<u>Sebastes maliger</u>	0.00003000000	2.93000
Rockfish, Black	<u>Sebastes melanops</u>	0.00001965710	2.95480
Rockfish, Vermilion	<u>Sebastes miniatus</u>	0.00002677000	2.91650
Rockfish, Blue	<u>Sebastes mystinus</u>	0.00001624670	2.98849
Rockfish, China	<u>Sebastes nebulosus</u>	0.00000564040	3.20470
Rockfish, Speckled	<u>Sebastes ovalis</u>	0.00000324000	3.25050
Bocaccio	<u>Sebastes paucispinis</u>	0.00000583320	3.09410
Rockfish, Canary	<u>Sebastes pinniger</u>	0.00001051000	3.05560
Rockfish, Grass	<u>Sebastes rastrelliger</u>	0.00000575900	3.23500
Rockfish, Rosy	<u>Sebastes rosaceus</u>	0.00001678900	2.99430
Rockfish, Yelloweye	<u>Sebastes ruberrimus</u>	0.00001304370	3.05710
Rockfish, Flag	<u>Sebastes rubrivinctus</u>	0.00002346750	2.94310
Rockfish, Stripetail	<u>Sebastes saxicola</u>	0.00000706700	3.12010
Rockfish, Olive	<u>Sebastes serranoides</u>	0.00000521020	3.15410
Rockfishes (general)	<u>Sebastes spp.</u>	0.00000521020	3.15410
Rockfish, Sharpchin	<u>Sebastes zacentrus</u>		
Yellowtail	<u>Seriola lalandei</u>	0.00003374300	2.85000
Jack Mackerel	<u>Trachurus symmetricus</u>	0.00000331000	3.22320
Shark, Leopard	<u>Triakis semifasciata</u>	0.00002089000	2.88000
Unidentified Fishes	<u>Unidentified Pisces</u>	0.00000000000	0.00000
Prickleback, Rock	<u>Xiphister mucosus</u>	0.00000000000	0.00000

